

# Galaxy

SCIENCE FICTION

JULY 1958

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HIS NAME

By

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OF  
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# COMING SOON

**M**OVIES and TV were foreseen by science fiction long before they came about. The crystal ball went cockeyed, however, when it squinted at the entertainment; its swirling draperies and heavenly music would net a .0001 Trendex in this Year of the Horse: horse opera, horse laughs, horse play, and other equine attributes.

Pinpointing any device is the easier part of extrapolation. Anticipating effects is a lot harder, and still more so for the Utopians who mainly wrote our early science fiction; they had the most *innocent* notions of how things were to be manufactured and distributed, and especially *why*.

Whirling draperies and heavenly music may be fine for a first viewing of TV or movies — anything would be — just as Times Square struck G. K. Chesterton as an awesome sight for someone who can't read, which is much like the "sense of wonder" sought by paleolithic fans who got trapped in the lowest strata of science fiction. For people eventually learn to read, to grow selective, to pay less attention to a wondrous gizmo than what it's meant for.

And so the reality behind each change is a sort of reversal: "Good greshams drive out the bad," a

gresham in this instance being a handy unit of desirability based on how severely what's new clobbers what's old — and how smartly and trickily what's old fights back.

Once radio showed how shows could be financed, the shape of TV was cast, or at least extruded. Add the stuff that movies are made on and you have form and content. With one free and the other not, the sound of war was inevitable to anybody with a good ear for greshams, even if the actual tactics and weapons stayed invisible. At this short distance, those and the principal battlefields show up on the picture of the future:

Unless its heads display sudden and unlikely braininess, pay TV is no challenger. Its ad-free programs are not recoilless when the viewer faces the charge at month's end.

As long as it's free, commercial TV doesn't *have* to get better. Even if it gets worse, a "What if-?" that dismays the sturdiest extrapolative mind, its prisoners can't break out of the living room stockade without spending money.

This particular skirmish is won by the entertainment generals with the biggest greshams: the movies. There are two hows of it, as dia-  
(Continued on page 4)

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(Continued from page 2)

metric as guerrilla and pentomic warfare.

Time wrote up one hero of the guerrilla attack: Kansas City's Elmer C. Rhoden, Jr., 35, president of Commonwealth Theaters, a chain of 102 film houses. Rhoden says TV is for the older folks; teen-agers on a date don't want to stay home. He pulls in the youngsters with rock-'n'-roll-'ems like *The Delinquents* and *The Cool and the Crazy*, made last year for \$171,000. Rhoden will produce *Daddy-O* and *Sideburns and Sympathy* this year.

The opposite of these snipers are the wraparound CosmicScopic, StentorPhonic gigantacles, the cost of each greater than any single theater — *The Ten Commandments*, for instance, at a megabuck per Commandment. Like Niagara Falls, they can't be invited to the home; they have to be traveled to, which is the how-come rather than know-how behind their vast budgets.

It is inevitable that Generalissimo of all the Cinemarmies should be Cecil B. de Mille, whose fifty years of geophysical biblicalumness put him half a century ahead of his film foes — and ever out of the ken of TV's creepie-peepie cameras.

When the current pictures are released to television, can you imagine the Flight from Egypt on

your home screen? Marching cigarettes, it will seem, one opened carton pursuing another through a cloven bowl of Jell-o.

TV screens can get larger, of course, can even become theaters-in-the-round like today's movie houses, an entire room bowed out and windowless — but is that a gresham to bet on with homes and apartments growing smaller?

No, the fields and forces are in focus now:

TV, bigger but limited in size, with color to come, manned by the kids and old folks.

The dim caves of dragstrip riots and mug monsters, hidden out in by teen-agers on dates.

The Grand Canyon palaces, featuring worlds in collision, nations on the move, skyscraper (as opposed to mug) monsters, visual tons of flesh loving or hating each other — pincering families on outings.

It's the particular misfortune of science fiction to have become cinematic vogue just when the chips came down. Only its most primitive themes, dripping horrors and astronomical catastrophes, fit the cave and canyon screens. TV could do the good modern stories; there's even a chance it may.

That great big Asteroid Belt up there — was it caused by a long-ago Mike Todd's attempt to outdo a de Mille?

— H. L. GOLD

ALL ORIGINAL  
STORIES

# Galaxy

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## SCIENCE FICTION

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Cover by DEMBER showing first manned satellite, cut away to reveal lone operator and controls. Radar viewer in center gives continuous visual information to spacemen surrounded by recording instrumentation and equipment in blind vehicle; the window-like openings are solar-power units. Small jets power return to Earth, braking by ribbon chute on reentering atmosphere. Final stage of rocket following satellite in background.

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WILLY LEY, Science Editor

W. I. VAN DER POEL, Art Director

JOAN J. DE MARIO, Asst. to the Publisher

SONDRA GRESEN, Asst. to Editor

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# the back of our heads

By STEPHEN BARR

*She traveled from life to death and back again like a commuter on the 5:15 . . . except each trip brought her nearer the beginning of the line!*

Illustrated by DILLON

**I**N reading this report, it must be borne in mind that when the word "they" is used, it does not refer necessarily to separate entities as individuals.

It is possible that a closer analogy would be the cells of an or-

ganism — which, in a sense, we ourselves become when we are in a pack or forming a mob.

On the other hand, that particular cell or entity which this report deals with exhibited at all times marked individuality — even ec-



centricity — and will hereinafter be referred to as "she." This is because "she" invariably assumed a female form when visiting us, and because she furthermore gave every indication of that type of mind and point of view which is generally met with in the more noticeable, effective or contentious members of that sex.

As she put it herself during the hearing, she was always in hot water.

\* \* \*

**THE FOUR** teen-agers — one girl, three boys — weren't allowed in the bar, so they went down the street to a joint where there were a soda fountain, booths and a jukebox. They sat in a booth and a waitress came to take the orders: three hot dogs and three cokes.

"What about you, dear?"

"Just a glass of water." The waitress started to leave. "No, wait — gimme a white on rye, too."

The waitress left, then came back again. "What was that you wanted, dear? Some kind of rye-bread sandwich?"

"Changed my mind. Make it a buttered pecan, but tell 'em to go easy on the butter. And I don't want no French dressing. Make it on whole wheat."

**T**HE waitress looked uncertain. "You mean a *nut* sandwich?"

"Yeah, only malted. With lettuce and chocolate sprinkles."

"Who you kiddin'?" the waitress said, and turned to go.

"No, hold it. Tell Joe to please scramble them on both sides."

"What you *talkin'* about?" the waitress said. "We ain't got no one here called Joe."

"So okay, Joseph, then. Tell him just a boiled egg sunny side up."

The waitress left, frowning.

"Our Miss Framis," one of the boys said, meaning the girl, and the others smiled. They looked as though they were sneering at the same time and hoped they would be taken for juvenile delinquents.

There were two very odd-looking men in the booth opposite and they were listening to the conversation. Their oddness lay in an atmosphere rather than in any physical abnormality. The girl noticed them and nudged one of the boys.

The three boys looked at the men resentfully and one of them said something under his breath, but the girl said, "Button it." Then she asked the men opposite, "Lookin' for someone, mister?"

The two men looked away, and this made the boys feel brave. One of them said, "Let's give 'em the works."

"No, leave it to me." The girl got up and went across to the two men. "Me and my friends was wondering. Maybe you gentlemen would like to come to a trake in the gort later?"

The three boys snickered and

the men looked up at the girl and waited with blank faces.

"Or maybe you'd rather we put on a hanse for you?" she said.

"No, sit down," one of the men — the bigger one — said, and moved back to make room for her. She glanced at him with surprise for a moment and sat down next to him.

One of the boys started to get up when he saw this, but the others pulled him down again.

"What did you say to us just now?" the big man asked. "It was too small in here."

She shook her head and frowned. "Why, that was just . . . I said did you want for us to put on a hanse, is all." She had a rather feeble grin.

"Yes," the big man said. "We do."

She glanced back at her friends nervously, and then at the man again. "I don't get you," she said.

"Neither do we," the smaller man said.

The boys across the room were listening quietly and then one of them said, "Go on, tell 'em, Miss Framis."

"We just want you to quint," the big man said, "and won't thursday on it."

She stared at him without expression and got up slowly. She went over to her friends. "Let's get out of here," she said.

She was shivering.

**Q** You say you object to this line of questioning?

**A.** (She) No, I just don't like being spied on. And it made the kids . . . mad. They wrecked the car and that meant starting all over again.

**Q.** The car?

**A.** Yes, their hot-rod. When we got outside, they acted the way teen-agers do and went too fast. They were sore at those spies — they took it out on the car, so it went off the road. It turned over three times and we were all killed.

**Q.** They were not spies. They were acting on their own.

**A.** I didn't know that. I just knew something was funny. Anyway, how can you say that? They're a waste. And it would have been part of you, just as I am. It was more of a waste if I hadn't been split. The other part was only about eleven years old and I had to wait another six years to —

**Q.** It is your own fault if you were split. You cannot blame us. This has happened before — you have aimed badly and arrived wrong. Don't forget about the help.

**A.** Well, in this case it's a lucky thing I did; otherwise the whole thing would have been wasted. And the kelp—that was dreadfully dull. I wanted to try a really primitive form, but

not *that* primitive. Then I got washed up and it led to the cat. After they got the iodine out of the kelp, I was suddenly a cat.

Q. This has not been reported.  
A. I'm reporting it now. It wasn't dull in the least, but they were very superstitious about cats in those days, and they decided I was possessed.  
Q. They saw through you?  
A. Oh, yes. People usually do.  
Q. You couldn't have been very successful if they saw through you.  
A. It doesn't make any difference if they see through you. The important thing is to see through them.  
Q. But you were a cat.  
A. Cats are in a very good position to see through people. I think they sensed that. Anyway, I was . . . done away with.  
Q. Burned again?  
A. Yes.  
Q. Seems to be a habit of yours. What happens? How does it feel?  
A. I cannot explain it to you, but I know what to do. It's not *my* habit — it's one of theirs, but it's dying out in most places now. And there was a time when it would never have occurred to them. They were too frightened of it.  
Q. Frightened of what?  
A. Of fire. It was very new then . . .

THE hunters came back to the cave at dusk, and one of them went to the fire that was kept going constantly in front of the opening. He took a dry branch and held it in the fire until the end caught. Then he held it up. "If we take this, we can hunt in the dark," he said. "And when it is nearly eaten by the fire, we can take another branch and start it again. That way we do not need the moon."

"That way we can hunt until we are tired," said the other.

"That way we can kill twice as much game," said the first.

"There is so much game in the cave now," a young woman said, "that it is beginning to smell."

The older hunter glanced at her apprehensively; she made him feel foolish, always finding fault with his plans. "Perhaps so," he said. "But at other times we starve."

"Besides," she said, "if you take the fire with you to see where you are going and to see the game, the game will see you."

The hunters looked at one another and shrugged. The woman went into the cave and returned with an earthenware pot. There were pieces of raw meat and some water in it, and she put it on the fire, propping it in position with three stones. The second hunter looked at the pot curiously. He was a younger brother from the other side of the valley, where he lived

with his mates. He pointed at the pot and looked inquiringly at the older brother.

"She made it out of mud," the older brother said.

"Why doesn't it fall apart with the water in it?"

"I put it into the fire first, for a long time," the young woman said. "A very big fire. The mud gets red — and then it gets hard so it won't melt when the water is in it."

The younger man looked surprised. "Magic?"

"Yes," said the other man.

"Nonsense," said the woman. She went back to the cave and the young man put the end of his spear into the fire and tried to scrape the side of the pot with the flint head, but the flint was cold and it cracked. He pulled it back and was looking angrily at it when she came out again and sat on the ground. She had an armful of roots which she began to scrape with a sharp stone. "The spear-head is made of the wrong sort of stone," she said, without looking up. "That is why it broke in the fire."

"It's made of the *right* kind!" the young man shouted. "All spear-heads are made of that kind! They always have been and they always will be! How did you know it broke in the fire? You weren't looking."

"I heard it make the sound it

makes when the fire breaks it."

The young man glowered and pushed his under lip out. "This kind of stone was put in the cave for us to make knives and spears. And it makes a very sharp edge when you know how to form it."

"No sharper than this knife," she said, holding up the stone in her hand. "This doesn't break so easily."

The young man took it and examined it carefully. "How do you strike it to make it this shape?" he said, and then, grudgingly, "It is very smooth — a very good shape."

"You don't strike it," she said, taking it back and going on scraping the roots. "You rub it on another stone — first on the kind that has the bright sparkles in it, and then under water on the flat gray kind. It's much better than your knives and the fire doesn't break it so easily."

**S**HE finished with the roots and put them in the pot with the meat.

"Where do you find such big roots?" the young man asked his brother.

"Over there," the brother said, pointing to a patch of earth nearby. "She finds them there."

"I don't find them," she said. "I put them there in the first place."

"You mean you store them in the earth?" the young man said.

"No. I put the tops in the ground — the blue and yellow flowers — and next warm season I dig and there are the new roots. You have to put water on the earth when it gets dry. Also you have to pull up all the small plants that grow there among them. It's very hard work."

"More magic," said the young man.

"It's not magic!" she said. "You are stupid. Haven't you noticed that when you leave an acorn on the ground, it breaks open and a finger goes down into the earth? And then, after the next rains, it makes little leaves — and if you leave it alone, it grows and in time becomes a young tree?"

"Everyone knows that," the young man said disdainfully.

"Well, this is the same."

"Yes, but what makes the roots so big? I never saw any like these."

"That's because I only take the flowers from the plants that have the biggest roots. And if any of the new roots are little, I throw away the flowers from them. Far away."

"What do you do with the little roots?"

"Eat them."

"I don't understand. If you eat the little roots, why don't you get little roots?"

"You are being foolish again!" the young woman said. "A tall man has tall sons."

"If he eats the meat of a tall animal," said the young man.

"That has nothing to do with it."

"My friend's father, who lives near the river, always eats the fat of the game they kill, and he is fat. So you see!"

"That has nothing to do with it," she said, and went into the cave.

The young man walked up and down angrily. "Why does she talk that way? Is she one of our sisters? I don't remember her."

"No," said the other. "She was with the people we fought with three seasons ago. She is my new mate and she is very good at magic, only I advise you not to pay any attention to what she says."

The other picked up the scrapping-stone she had left and looked at it with grudging envy. "The very tall man who killed the aurochs by himself has a son," he said, "and the son is short."

The other shrugged. "Don't pay any attention to her."

The woman came out again and looked at the sky, then went to the fire and stirred the pot with a stick. "I wish you would try to get the young animals," she said. "You always bring home the biggest ones and they are hard to chew unless I cook the meat all day."

"My father said that if you wish to be brave, powerful and swift, you must eat only the animals that are brave, powerful and swift,"

said the young man obstinately.

"Didn't he eat roots, too?"

"Yes."

"Well, then."

The young man threw the scrap-ing-stone hard against the side of the cave opening and split it in two. "Roots are not animals!"

THE young woman picked up the pieces and said, "I think I can make a small scraper out of the big piece and a throwing tip out of the little one, but this is a foolish way to get little stones. There are more little ones than big ones."

"Show him your bent stick with the animal sinew," said her mate. "She has a way of throwing very small spears with a bent stick," he said to his brother. He had a dim feeling that there should be peace between the other two, since they were near his cave, but he was scarcely aware of the feeling.

The young woman looked pleased and went into the cave and brought back a stick of springy wood with a thong attached to one end, and a few dried reeds.

"See," she said, and took a dried reed which had a small sharp stone stuck in the end of it. Then she bent the stick and strung the sinew from end to end. The younger man had his first view of a bow and arrow. "This was the way my mother showed me to throw little spears."

She fitted the arrow into the bow and, pulling it back, shot it at a pine tree on the other side of the fire. The bowstring twanged and the arrow wobbled, having no fletching, but it stuck into the tree trunk. The young man jumped back in alarm and blinked his eyes. Then he went to the tree and pulled at the arrow. It came loose, leaving the tip stuck in the bark.

"What good is it?" he said derisively, to conceal his astonishment. "It is a child's plaything!" He tried to pry out the arrowhead with his thumb, and broke his nail.

"If any child of mine played with this," said the young woman, "I should beat him." She put a larger arrow into the bow — one that had a heavier tip — and shot it into the same tree. Owing to its superior balance, this arrow did not wobble; it swished through the air and sank its tip deep into the soft wood.

"You have no child," said her mate, "so how can you beat it?"

The young woman said nothing, but she looked angry.

"My other women have chil-dren," he went on tauntingly. "They laugh at you."

"You have no child younger than ten seasons!" she said, and stamped her foot. "That is why I have no child! You are an old man!"

He started toward her with a

look of furious intention. He had no spear in his hand, but he held a club with flint splinters stuck in the heavy head. She ran back to the cave mouth and put another arrow in her bow and aimed it at him. They both stood silently staring at one another. Then he threw down his club and turned away.

"Peace," he said.

"Peace," she replied, and dropped her bow. She went to the pot over the fire and sniffed it, poking at the meat with a sharp stick. "The food is ready," she said. "Will you take the pot off the fire? You have braver hands than I."

**Q** How are we to find out anything about them, when you are so slow?

**A.** What are we supposed to find out?

**Q.** That is what you are supposed to find out.

**A.** I am to find out what I am to find out? You sound like them —like men.

**Q.** Like Man?

**A.** No, men. The women aren't quite the same. That's why I always choose to be one, but I wish you would send somebody else — another part of our Organism. I'm tired.

**Q.** Absurd. Besides, you are the best; you cannot be tired.

**A.** The best! How am I the best? You do nothing but criticize. You send me because I under-

stand the intentions — the leanings — of live things. You say I understand understanding. I suppose that makes me some kind of epistemologist: the father confessor of the inscrutable.

**Q.** Wouldn't it be mother confessor?

**A.** Not with them; they don't like women to be priests. They can be holy, but they don't like women to tell them what to do. It's called nagging. They get especially angry if the woman is right.

**Q.** Hmm. Now you say that we criticize you. You surely are not going to claim to be above criticism *here*, are you?

**A.** Oh, no. I'm beneath it.

**Q.** Then why do you resent it?

**A.** Because it doesn't apply. If a mother is not a fool, she will correct her child, but she won't blame it. You can't go looking for good and evil motives in everything that happens. Does a stone have a motive when it falls to the ground?

**Q.** If this is the way you always talked, I'm not surprised you angered them.

**A.** I am sorry.

**Q.** You turn everything around that's said to you.

**A.** I will try not to. It's like the bishop — he complained about the same thing, and I was only trying to —

Q. What bishop?

A. I forgot his name. He was the thin one; he was much cleverer than the others. He gave me an impossible choice, so I chose to make another start.

Q. You mean you got yourself burned again?

A. Yes! They did it to all their best people. Both sides did. I would have looked a precious fool if I'd backed down.

Q. Can't you bear to admit you are wrong?

A. But I wasn't wrong. Anyway, they'd have made me out in the wrong either way.

Q. Did they only burn the women, when they thought the women were wrong?

A. No, of course not. And it was usually when they suspected the women were right. Then there were the women who were thought to be possessed by what they thought were evil spirits.

Q. They didn't suspect *they* were right, surely?

A. No, but they were afraid they might be. They were very unsure of themselves and their beliefs. That's when they burned people.

Q. It sounds very wasteful. They must be very careless of their possessions.

A. No, not in the least. I'll explain —

Q. I wish you wouldn't.

A. There, you see? They were just like you — they kept asking me questions and getting more and more enraged when I answered them. So, to shut me up, they tied me to a stake.

Q. You are too interested in your own reactions to things. Tell us about something more constructive — about what you found in other guises. I understand you led an insurrection?

A. If you call throwing an armed robber out of your house an insurrection. The trouble was that on that occasion a lot of my friends thought I was right. That's called conspiracy . . .

THE captain led a small group of foot-soldiers into the village at what, to the Romans, was the Twelfth Hour, which is sunset. The soldiers had light armor and carried only the small shields — not the enormous *testudines* — but they had been warned to keep their eyes open as the British were tricky, even treacherous. The captain greatly disliked to take such raw troops so far north, where the treaties were uncertain and the Pax Romana was held lightly, if at all. An ancestor of his, also a captain, had been killed near here in one of Hadrian's marches, and no one was quite sure what had happened.

The earth wall that Hadrian's men subsequently built across the

British island was intended to keep out the more unruly natives of the North, and later the emperor Severus built another one of stone, but it was by now in a state of disrepair and only a few of the guard towers were manned. Even the Great North Road made an attenuated and unreliable line of supply, and the captain could expect neither reinforcements nor food from the camps further south, like Eboracum or Lancastrium.

Live off the land, he was told, and that meant quartering his troops — a risky thing because it separated them — or sending foraging parties to the surly farmers for "contributions." Since he was here to collect back-taxes, the inhabitants would not take kindly to feeding the collectors.

The village had a stockade of undressed logs and wide gates at either end. These were surmounted by arched wooden structures that were supposed to serve as watchtowers, but beyond spears and knives for hunting and the necessary farming implements, the villagers were not allowed to carry weapons of any kind. The stockade was not big enough to enclose all the houses, and the majority of these were on the outside and huddled against the walls.

The small body of Roman troops — barely a *manipulus* — were not surprised to notice that all the windows and booths had

been shuttered, and in the exact center of the village, the local chieftain and heads of families were gathered in a respectful and anxious group. It annoyed the captain that it was impossible to make an unexpected arrival anywhere in Britain; news traveled faster than Roman foot-soldiers.

"Hail Caesar!" said the captain, putting his arm up, the palm of his hand facing forward.

"Hail Caesar!" said the villagers.

"We come for the taxes which were not paid last year."

The villagers shook their heads and made regretful sounds.

"Nor the year before, nor the year before that. Which is your headman? I shall require food for my men at once — they are tired after a day's march."

A gray-bearded, very tall man stood forward. "The food will be ready at once, noble decemvir, and I hope you will honor me with your presence for dinner."

"Thank you very much," said the captain, "but I prefer to stay with my men until I see them taken care of. And I am not a decemvir. My rank is captain — Caesar's captain."

The bearded man bowed and said, "Then, after the arrangements have been made, Captain, will you not take a cup of wine?"

"Don't press him, Grandfather," a voice said from above them, and,

looking up, the captain saw a girl's face at a second-story window. She had very dark skin, red hair and blue eyes. "If he's been walking all day, I expect he wants to go to bed early. You'll only keep him up all night talking about boar hunts."

"Silence!" the headman shouted. "Get back, girl! You insult our . . . our guest!"

"No, let her stay," the captain said with an amused smile. "Better still, have her come down. I think I shall accept your offer about the wine later."

**I**N the evening, the captain came to the headman's house with his two lieutenants as guard. They were received with deference and given wolf-hides to sit on. The wine was brought by the granddaughter and served in horn cups.

"What is your name, young lady?" asked the captain politely. "This is excellent wine, by the way."

"Thank you, Captain," she said. "We have had a cask taken to your men. I made it myself, three years ago. My name is Boadicea."

"Boadicea?" said the captain in astonishment.

"No, no, Captain!" the headman said hurriedly. "She's joking — her name is Flavia; the other is the name she takes for herself. I apologize for her."

"It is not a joke," she said.

"Boadicea is my heroine and I have taken her name. I don't like the name Flavia — it's Roman. Do I look like a Roman to you, Captain?"

"You look very beautiful," the captain said, laughing, "and there is no need for apology. I admire Boadicea myself; she very nearly drove Caesar's men into the sea. It was a long time ago." He drained his wine cup. "A long, long time ago."

"But we have not forgotten her, Captain," the girl said, filling his cup again.

"You insult our honored guest, girl!" her grandfather said. "Go to bed!"

"No, I beg you — please don't send her to bed," said the captain. "I'm not in the least insulted. After all, it's ancient history now. I don't think people think of us as conquerors any more. We are protectors. While we are here, the Picts stay where they belong, and the Scots, too."

"The Picts say they used to live hereabouts," said the girl.

"The Picts say, the Picts say! What do you know of what they say?" asked her grandfather.

"The cook's mother is a Pict," she replied.

"Well, she'd better not come here!" said the headman. "We want no Celts!"

"But, Grandfather, we are Celts!"

"No, girl, we are Romans," he answered, looking sideways at the captain.

The captain nodded. "That is true. All members of the Empire are Romans. Not citizens, perhaps, but Romans just the same, and all live by Caesar's law."

"But suppose people don't want to live by his law?" said the girl.

The two lieutenants looked shocked, but the captain smiled. "That would be most foolish and uncivilized of them. Don't you think it's better for the whole world to live as members of one community and cease all this useless warfare?"

"It seems to me," the girl said, "that warfare is the result of somebody trying to take somebody else's land and subject him to a law that is alien to him."

THE captain raised his eyebrows and put his head to one side quizzically. The headman coughed and attempted to change the subject. "The taxes, Captain," he said, "are very much on my mind . . ."

"And on mine," the captain said. The two lieutenants tried to look businesslike, but they looked more as if they were falling asleep.

"And I hope I may say that this time we will have them ready for you," said the headman.

"I hope so, too," said the captain.

"But there are other levies that have not been made, which we had

rather expected to be made . . ."

"Other levies?" The captain held out his cup and the girl poured more wine into it.

"I refer to troops, Captain," the headman said. "You levy no troops from us up here."

"You put me in rather an embarrassing position," the captain said. "You must realize that while I make no comparison to yourself, there are some people living at the outer boundaries of the Empire, people not yet wholly reconciled to Caesar's dominion, people who — to give another example — think of themselves as, say, *Helvetiae* first and *Romans* second. It is the Imperial policy in such cases not to levy troops because —"

"In other words," the girl interrupted, "you think we are not to be trusted. It quite passes my understanding why anyone should expect loyalty unless it is freely offered."

"But, my dear young lady, you are not slaves! You are given the civilizing benefits of Roman rule, and you are taxed very much less than people living in Rome itself, I can assure you of that." He felt terribly sleepy — the wine was stronger than he had thought and he found it difficult to think of the right words. He was beginning to sound to himself like a senator, a race of men he secretly despised. "Let me put it this way," he went on. "A child does not offer loyalty

to his parents—it comes by nature."

"Perhaps grown people do not like to be treated as children," she said. "I don't."

"You behave like one, Granddaughter!" the headman said. "Go to your room!"

Rather unexpectedly, she got up and walked to the door. "Good night, Captain," she said, but he did not answer. He was asleep and so were his lieutenants, and, since there were poppyheads in the wine, they did not wake up even when, an hour later, the shouting began outside.

**A**LMOST the entire detachment of the Roman troops was killed, and the captain and his lieutenants were being held hostage by the Pictish Decaledonae who had swarmed over the broken Wall — the break having been enlarged by the headman's granddaughter and her friends during the previous night.

The headman and his companions were horrified; they pleaded with the Pictish leaders to spare the Roman officers. "Caesar will send a legion," the headman said, "many legions to avenge this! Leave them unharmed and go back to the North, and the Roman captain will soften the blow that will fall on us all . . ."

The Picts told him to shut up and called for wine. The headman and his companions took advan-

tage of the carousing to slip out the back way and, taking some of the villagers, including Flavia, they hid themselves in a cottage in the forest. Except for the girl, they were shaking with terror. She was triumphant.

"Now Caesar will withdraw again," she said. "He no longer moves north — but slowly southward. The next Imperial rampart will be below us, and we shall be free!"

"You are mad," her grandfather said. "Under Roman rule, we are safe. What can we expect from these Pictish barbarians?" He looked at her as though she were some new kind of snake.

"I should rather be occasionally robbed by my cousins than taxed to death by strangers," she said, her dark face flushed.

"But the Romans are civilized!" said her grandfather.

"Their civilization stands on slavery," she replied. "I'd rather be a free barbarian. The Romans are doomed."

"This is revolt!" the headman said. "In the name of freedom, you deliver us into the hands of the Picts — you are a traitor to your own people!"

"The Picts won't stay," she said. "They never do; they hate farming. What does it matter if they burn the village and steal some of the farm animals? It will come to less than what you would

have to pay in taxes to Caesar."

"Caesar's men will return," said her grandfather, "and we shall have to pay ten times over. And if the Picts kill the captain, the Romans will have my life for it! You are a traitor! Who was with you in this infernal plot?"

**Q** Why didn't you tell them? Why are you always so stubborn? You might have stayed on and found out many useful things.

**A.** There would have been nothing useful to find out. Men who submit to autocracy cease to be a living, growing organism. Look at Egypt — it stayed that way almost uninterruptedly for four thousand years. However, I did find out one very surprising thing.

**Q.** I'm glad to hear it. What was that?

**A.** My grandfather was a Druid! I thought all that was dead and gone with the Roman occupation — but there was a secret sect and he was their high priest! So all the time he was in a conspiracy, too! I couldn't help laughing.

**Q.** How did you learn this?

**A.** They took me to an oak tree, put a wreath of mistletoe on my head, and he executed me with a stone sickle. Also all my friends who didn't have the sense to escape north over

the Wall of Severus. But it made no difference in the end. The next emperor withdrew the army to the southeast part of the island and the next — or the one after; I forget which — took them all back to Rome. This was after we invited the Saxons in — they made it hot for Caesar's men, I can tell you! They also made things rather hot for us, but everything calmed down in time.

**G.** It doesn't sound like much of an improvement.

**A.** Well, the Saxons may have been pretty bloodthirsty, but they hated slavery. They had sort of half-slaves — house-karls — but their heart wasn't in it. Also, although they were extremely rough, they didn't go in for official torture.

**Q.** But surely the civilized Romans didn't either?

**A.** I think you are being quite funny.

**Q.** I don't know what you mean.

**A.** I know you don't. That's the one really appealing thing about men: they sometimes have a sense of humor — when the joke is not on them. I think I must have caught it from them.

**Q.** Keep in mind that you are not an irreplaceable part of this organism!

**A.** How can I forget it?

**Q.** One gets the impression that

Man felt that you were not irreplaceable either. When they want war, you are against it, and when they want peace — like your North Britons — you are all for war. How did you hear about Caesar withdrawing from Britain?

A. I was supposed to go back a little later, but I missed again, and that time I was in real trouble — with both sides at once. It was just about a thousand years later, when the French and English were fighting each other.

Q. You seem to have made a rather dismayng number of mistakes.

A. I would never have learned anything if I had been afraid of making mistakes. Anyway, the bishops were the ones I had to fear the most, and when they started questioning me, I —

Q. Was it they who told you about the Saxons being invited to come in?

A. No, indeed. By that time, scarcely anyone knew anything any more, except prayers, recipes and how to supposedly cure warts. Later on, there was a revival and everyone became very clever, but I was in Italy at the time and I never got to hear about the Saxons until long afterward — my last trip but two, in fact. I was at a school in England . . .

THE headmistress of St. Agatha's prided herself on being fair. Her way of being fair was to avoid favoritism by being equally unfair to all the girls and to those of the assistant teachers who would stand for it. Some of them didn't, and they usually left after their first term, as the headmistress didn't believe in contracts. Besides, at the beginning of the twentieth century, contracts for teachers were a novelty.

The result of this policy was a rapid turnover in the young and intelligent teachers, and a small permanent staff of compliant sheep. That St. Agatha's had any scholastic standing was due to the fact that Miss Wakefield had taken honors at Girton, and the school's social standing was due to her being the cousin of a Peer of the Realm. The girls were fed almost enough, the school uniform was expensive, and nobody had much free time. French was well taught — by Miss Wakefield herself — and so was Latin, but games were also stressed. The school was run on what Miss Wakefield called the Honor System, which had the effect of dividing the pupils into tale-bearers and secret rebels.

On a raw November afternoon, Miss Wakefield sent a prefect for Sarah Stone, who was one of the new girls. "Tell her to come straight to my office. She can have her shower later," she said, and

Sarah arrived in the jersey and serge skirt she had been wearing on the hockey field. Her bare knees were blue and her nose was running. She stood waiting while the headmistress looked with prominent eyes at some papers on her desk. Sarah could see that they were examination papers and one of them was in her own handwriting.

Without looking up, Miss Wakefield said, "I hear that your mother is in trouble with the police."

"But she—"

"Do not interrupt. I asked you no question and no answer is called for. It is a fact, which I have just read in the *Morning Post*, that your mother is in trouble with the police. Again — is that not true?"

"No."

The headmistress looked up in amazement. "Do you mean to stand there and tell me the newspaper is *lying*? Do you tell me to my face that your mother is not involved with the . . . the authorities?" Miss Wakefield also taught English Composition and woe be to the girl who used the same word twice in the same context. "We are blessed with the richest of all languages," she would say, "so let us explore it — let us make use of it — for to do otherwise would be tautology." She never made clear what tautology meant, but the girls got her drift.

"I don't know whether the news-

papers are lying or merely mistaken, Miss Wakefield," Sarah said, "although my mother says that it's hard to tell the difference with most journalists. At any rate, she is not in trouble with the police. They are the ones that are in trouble."

The headmistress stared hard at Sarah; she was rather good at this with small girls of thirteen. (You and I might find it difficult to stare down a child, and impossible in the case of a kitten, but Miss Wakefield was, after all is said, the cousin of a Peer of the Realm.)

"I believe I can understand that," she said. "In fact, I pity the arresting officer. Here is a woman who breaks shop windows for the sake of attracting attention to her political clique, and he is no doubt subjected to scratching and biting. Votes for women, indeed! Does breaking shop windows prove that people like her should have the . . . the franchise?"

"She didn't break the window," Sarah said. "She was pushed against it by the policeman. And she never scratches unless a mosquito happens to —"

"You were not there, Stone," said the headmistress, "so how can you say that?"

"I know my mother. And she doesn't bite, either," Sarah said, looking at Miss Wakefield's neck. "Unless it's a tough old hen!"

MISS Wakefield had enough sense to refuse the bait, but she flushed. "I do not feel that it is at all suitable for the mother of one of our girls to be a Militant Suffragette! The reputation of the School . . ." The sentence was left unfinished.

She picked up the sheets of paper. "I have here two of the mid-term examination papers in arithmetic, yours and Angela Harvey's. There is a curious, a very curious similarity between them. All the answers are correct except for problems five, seven and twelve, and they have precisely the same mistakes in both papers!" She paused and stared hard at Sarah, who blinked but refused to lower her eyes. "You and Harvey sit next to one another," Miss Wakefield said meaningfully.

Sarah said nothing. She sniffed because her nose was running and there was no pocket in her games uniform for a handkerchief.

"Well?" said Miss Wakefield. "Have you nothing to say?"

"No, Miss Wakefield," Sarah said, "except I didn't copy from Angela, if that's what you mean."

"Then it would appear that she copied from you."

"That's a beastly thing to say! It was a coincidence! She's not a cheat!"

The headmistress felt on secure ground: the child was losing her temper. It was Miss Wakefield's

favorite strategem to make people lose their tempers — that is, if they were children or underlings.

"Blow your nose, Stone," she said, and then, seeing that Sarah had no handkerchief, she gave her her own, with a look of distaste. "I think perhaps you might do better at some other school."

"So do I, Miss Wakefield," Sarah said. "Mother wanted to get me into Mr. Russell's school, but it was full up."

"Bertrand Russell?"

Sarah nodded, blowing her nose again. She was shivering.

"Well!" said Miss Wakefield. "I never heard the like! He's an Atheist! Why, he believes in *Free Love*!"

"I don't know what he believes," Sarah said. "I know he was awfully nice when he came to tea. He said I had some kind of a guiding somebody standing over me. He said he would like awfully to have me at his school, but it was full up. I know one of the boys there and he says it's simply ripping."

"Well! Of course, if your mother thinks of us as Second Best . . . Perhaps Mr. Russell believes it is all right to cheat in examinations, but we have a Tradition at St. Agatha's." She rang a bell on her desk and a scrawny little housemaid came in. "Send one of the girls for Angela Harvey," Miss Wakefield said. "Tell her to come here directly." The little house-

maid bobbed respectfully and went out. "Now we shall see what *she* has to say," the headmistress said.

"She'll only be frightened and cry," Sarah said, "and she'll say anything you want her to. She wouldn't *dare* cheat in an examination."

"Then you admit that you copied from her?"

"I do not!" Sarah said, her teeth chattering. "I tell you it was a fluke! Miss Somerville jolly well knows I wouldn't do it!" Miss Somerville was the new and still enthusiastic math teacher, but her enthusiasm would be gone by the end of the term, and so would Miss Somerville.

"That will do!" said the headmistress. "Impertinence will not improve matters."

**T**HREE was a timid knock on the door and a girl of Sarah's age, but smaller, came in. She had changed into the school uniform and wore steel-rimmed spectacles.

"Stand beside Stone, Harvey," the headmistress said. "Now I want you to think very carefully before you answer what I'm going to ask you."

Angela Harvey looked terrified and began to cry.

"There, you see?" Sarah said. "You're only doing this because you don't like my mother! You want me to leave school, and it's

the only excuse you can find!"

"Be quiet," Miss Wakefield said with an unpleasant smile. She never lost her temper. "Did you, or did you not," she went on to the damp Angela, "copy the answers in your arithmetic from Stone?"

"Oh, no! Oh, I *wouldn't*, Miss Wakefield!"

"Then how is it you have seventeen right answers? You never do as well as that, and you got the same three wrong that Stone did."

"I don't know, Miss Wakefield! I don't *know*!" Angela sobbed loudly and became smaller than ever.

"I'm afraid," said Miss Wakefield, who looked quite otherwise, "that unless your *friend* here can explain this curious — this odd coincidence by admitting she copied *your* answers, I shall have to ask your parents to remove you from St. Agatha's at once."

Sarah's face was bright red, but it had the look of fever. "How simply rotten of you! You're just trying to get me to confess to something I didn't do, to save Angela!"

The headmistress felt her heart beat with excitement and pleasure. Why, the child was positively crimson with temper! "You are not helping her by behaving like a common guttersnipe. At this school, we try to behave like ladies. Perhaps at Mr. Russell's—"

"At Mr. Russell's school," Sarah

interrupted, "I'm sure nobody would think it was worthwhile to cheat."

"Then you admit you cheated?"

Sarah looked at Angela, and back at the headmistress. "Yes!"

Miss Wakefield smiled. "Well, then, I think there is nothing more to be said. You may go, Harvey."

"You," Sarah said, looking at Miss Wakefield with blazing fury, "are a coward and a — a *black-mailer!*"

Tiny cracks seemed to appear in the headmistress's porcelain composure. Angela had not yet left the room and heard Sarah's outburst. She stopped at the door and turned around with wide eyes.

"Go at once!" cried the headmistress to her, and waited until the door closed. "You are to be expelled publicly from the school!" she said to Sarah in a low, unsteady voice. "And first you will be publicly thrashed!"

Sarah's face was patchy now, red on white, and her skin looked dry as paper. "If you touch me, I will kill you. I'm not afraid of anyone like you. I didn't cheat in the exam. I said it to keep you from expelling Angela, and you knew it all the time. Everything you say is a lie. You just want to get rid of me because of my mother. You are against votes for women because you are a liar. You told us in history class about government by consent, but how

can it be when half the population have nothing to say in the matter? I'm going to pack and leave, and if you try and stop me, I'll . . ."

She went fiery red, and then white, and fainted.

The headmistress was breathing hard, and later, when Sarah was taken to the san, she was frightened. Sarah's temperature was 107 and she had the most virulent kind of pneumonia the school doctor had yet come across. He was almost more curious in watching the course of the disease than he was concerned with the patient, but he did not have very long to watch it, for Sarah died shortly before sunrise.

**Q** As far as one can follow your line of reasoning, you claim that the head woman of your school was untruthful, but was against untruth.

- A. Yes. Quite a lot of them are.
- Q. They sound mad.
- A. Well, they are and they aren't. They lie to themselves, mainly; that's what causes most of the trouble. They have a saying: *Know Thyself, but nobody ever —*
- Q. *They have? Who said it?*
- A. All sorts of people are said to be the ones who said it first, but actually I think I was. I was living on an island in the Aegean Sea, and the main-

land Greeks thought women shouldn't be writing poetry, so there was a row about it. They said I invented hexameters — which was nonsense — and that made them angry for some reason. So, later on, they decided I was a myth.

Q. Is this the Sappho you mentioned earlier in this hearing?

A. No, no. She was later and she didn't become a myth. My name was Phemonoë. I meant to tell you about that trip. My father was —

Q. Never mind. We've heard enough of the early trips. What we should like to hear about is your last. A decision must be made about these people — we've waited long enough. While it must be admitted that you are the best we have for the task, you not only take a long time and make error after error, but in the very process of examining them, you alter the subject of examination.

A. Yes, I know. They have a new phrase for that. They call it the Uncertainty Principle. For example, you can't determine the mass and velocity of a particle and at the same time its position. If you measure the one, you alter the other.

Q. We are quite aware of that.

A. I just thought I'd remind you.

Q. Unnecessary.

A. That's what men usually say;

they dislike being reminded. Am I to stop making trips?

Q. That will be decided in the light of the rest of your report. I may tell you now that there will probably be no further trips. You will be reabsorbed into the Unity.

A. I see. I remember you said the same thing after I reported on the time they hanged Haman. You seemed to side with him. Anyway, if I get reabsorbed, it won't be a Unity any more—not the way things are going.

Q. You overrate yourself. Contact with Mankind has changed you.

A. Oh, it has! I've changed them a bit, but it's the principle of uncertainty again: it changes me, too.

Q. The Unity is greater than its parts.

A. Not if it's infinite, the way you say it is. You know, it's a funny thing, but I've never been quite clear just what's behind all this decision you talk about. What is our purpose?

Q. Does a stone have a purpose when it falls?

A. I'm not talking about values. What are the alternatives you imply in the decision?

Q. There are three. We destroy them; we absorb them; we ignore them.

A. I'm afraid they can't be ignored.

Q. Why not?

A. It's too late. The Unity should have started ignoring them right at the beginning — we are already changed. And if they are absorbed, we shall be still more changed.

Q. They will be changed. The Unity is eternal and —

A. You ought to talk to a man called Heisenberg. He called it the inexactitude principle, but it's the same thing. For example, men are always going around asking each other questions; they call it taking a poll, only when you try to find out that way what people are thinking, you change them. Or anthropology — when you study a tribe, you alter its way of life. Furthermore, it alters yours.

Q. It would appear that you have lost your sense of objectivity.

A. That's the way my last husband talks. There is no such thing. It's a strange fact, but it seems that the mathematicians are the only ones who have a glimmering of the truth — they and the physicists. I was beginning to think that mankind as a whole was progressing quite nicely.

Q. I thought you said they were. It seems you're never satisfied.

A. Well, some things improve, but their point of view keeps changing with regard to what should and what should not improve. It's hard to say whether the Greeks really believed in progress: they thought there had been a golden age and that the world had degenerated from it. Some of them may have wanted to return to it, but I always suspected their motives — by their own showing, they were decadent. During the Middle Ages, it was felt that art was on the way up — part of an evolutionary process — whereas science was not. Aristotle and the Thomists had science all cut and dried. Nowadays it's fashionable to say the art was as "good" in primitive times as it is now, while science on the other hand is evolving to a higher state of truth. The latter happens to be true, but they still have war.

Q. Perhaps it's inevitable.

A. If it is, we are wasting our time.

Q. That is for the Unity to decide. You set yourself up as Mankind's conscience.

A. Not conscience. I plead for self-examination — for a reappraisal of ideas.

Q. Yet you only succeed in irritating them.

A. That may be the best way. And you confuse conscience with consciousness. If there's one thing I've found out, it's

that Man differs from the animals in having more consciousness, just as animals have more than plants. I don't suppose that hydrogen has any at all.

Q. But you have turned what was intended to be a field-trip for examination and analysis into a crusade. With all your nagging and irritating them, there have been no results — no real advances.

A. I thought you were complaining that I was altering what I was sent to examine. You talk about unification — or absorption — as if it were a catch-word. That's the trouble with generalities: they're not necessarily true in all cases.

Q. You mean they are too general?

A. I mean that they are not general enough. I agree that men progress too slowly toward unification, but we mustn't confuse it with domination. We cannot impose it on them. That would lead to a world divided into the ruled and the rulers—not a unity.

Q. Then you are for absorption?

A. You know, you twist things around much worse than I do.

Q. The Unity is incapable of —

A. Furthermore, I think you have been altered more than I have.

Q. You are part of the Unity.

A. And the least altered part. You won't be able to absorb them

the way you can reabsorb me without destroying them as entities.

Q. You set yourself up as the only one to know this. Why?

A. Because I have been the one to make the trips. I have been your eye.

Q. But the others — the ones you called the spies?

A. They weren't there to look at Man, only to watch me. They weren't even sightseeing — they were slumming. However, I think I am ceasing to be the only one. I think you are coming to know these things, too.

Q. Very gratifying. Now, as to the latest trip?

A. There seems to have been a slip-up ...

Q. Another one?

A. Different. The ones I made were errors in time; this one is not mine, and it's in hyper-time. I was trying to explain it to a friend, but he already knew all about it and that led to the slip-up. It caused it, yet it came afterward.

Q. How annoying for you. How did you explain hyper-time?

A. I said that when an object moves or changes, time is needed as one of the coordinates to describe that change. I said that consciousness moves through time — from Monday to Tuesday — otherwise we would be merely aware of dif-

ferences without experiencing them as change. I said that to describe this motion of consciousness along the dimension of time, *another* coordinate is needed: hyper-time.

Q. And the slip-up — which you claim is not yours?

A. Is in hyper-time. It is the result of the Unity and Mankind affecting one another. You have, through my efforts, examined them — and thus changed them. Now they begin to examine you — with the result that you change.

Q. They begin to examine *us*? You must mean they have examined you.

A. There is a man — a young physicist — and he has found out something. I think that without quite knowing it, he has detected you. At all events, he has found out where you are, and I think that perhaps you are aware.

Q. What makes you say that?

A. Obviously these things work both ways. Heisenberg's principle says —

Q. We want to hear no more of Heisenberg's principle! There's enough confusion as it is, without that!

A. I admit it. That's why I decided to — to close my eyes to everything but essentials on this trip.

Q. It is gratifying to hear you

admit something for a change. What are you "closing your eyes to" in this case?

A. Appearances.

Q. Why?

A. Appearances are deceitful. That is, they are now; they weren't before, when the Unity was the Unity and Mankind was Mankind, not something of each. You ask me to keep my objectivity and you don't tell me how. You can't, of course — your own is too lost for you even to know it's gone. So I have to work out my way alone and the best method seems to be to work with as few senses as possible. That won't give me real objectivity, but it will mean somewhat less involvement.

Q. The less you see, the more you can observe? Does that make sense?

A. Nothing does any more. Oh, if you had only stopped in time — no, that wasn't possible.

Q. Why not?

A. Because, being in hyper-time, the slip-up is both in the past and the future in simple time. The last trip is going on now...

**K**ATHERINE was lying on the lab sofa with her hands behind her head. The sofa was shabby and was alleged to have belonged at one time to a psychoanalyst. Its present function

was to offer temporary rest to anyone working late in the lab. Today was Sunday and no undergraduates were there.

"What are you fiddling around with, Phil?" Katherine asked.

"The electron microscope," he said. Phil Kaufman was an assistant physics professor, short, bony and intense-looking, and at the moment he was engaged in extracurricular research.

"You know, I bet this old chaise-longue could many a tale unfold," she said.

"Well, according to rumor, many have been unfolded on it."

"Professor, your mind wanders. I'm thinking of its previous condition of servitude. Think of the dreams it used to hear."

Phil Kaufman didn't answer. There was a pause and she said, "This afternoon you're working with the microscope, and last night it was the telescope. You were in the observatory until dawn."

"How did you find that out?"

"I have my methods, Watson. I don't see how you expect to keep going on no sleep at all. Russ is worried about you."

"Pro or con?"

"Pro, of course. He likes you very much. In fact, he thinks you are the best brain on the faculty."

"Coming from the president, that's praise indeed." Phil got up and went to a desk, where he looked at some notes. "Speaking

as my boss's wife, would you say he was pro or con about this work I'm doing?"

"I would say he can't make it out. Alternating between the Microcosm and the Macrocosm. Incidentally, why don't they call that thing in the observatory a macroscope? I don't think Russ is very good at understanding the unfamiliar. I was telling him about the concept of hyper-time the other day, and his reaction was one of solicitude — he got me a drink." Katherine stretched her arms. "What are you doing now?"

"Checking some figures. You know, that was odd, your bringing up the business of hyper-time. This thing I'm working on seems to involve it."

"Oh?" Katherine put her arms behind her head again. "Tell me something, Phil — what does he look like?"

"Doctor Russell Farley?"

"Yes. I suppose it's a funny sort of question to ask about one's husband. How does he look to you?"

"Like the youngest college president in America, I guess. Brawny but brainy. You make what they call a handsome couple."

"Yes, I was going to ask you what I looked like, only it's a waste of time. People never tell you."

"I can," Phil said, "but I won't, for fear of giving you a swelled head."

"A S a matter of fact, it's silly of me to ask," she went on. "I wouldn't understand. I don't even know what 'pretty' means, although I have a dim idea what 'ugly' does. Color is another enigma to me. Somebody once told me it's like a smell, but when I get a bad cold, I can't remember what smells are like. It's like not being able to think of the word 'bubble' when your mouth is wide open — you think of 'Ah-uh.'"

"I'll tell you one thing about yourself," Phil said. "You don't look as though . . ."

"As though I was blind?"

"Correct. And it's incredible the way you get around. You never bump into anything, and you look people right in the eye when they talk to you."

"They say it's hearing faint echoes from an obstacle — like a bat. Personally, I *feel* the wall in front of me. I admit when my ears are stopped up I can't hear the wall, but I'm not so sure that's a convincing proof. It's the same with pit vipers — some smart investigator discovered that when you plug up their little heat-detecting organs — I guess those are the pits — they can't locate warm prey in the dark. Conversely, in the dark and not plugged up, they will strike at a hot-water bottle."

"Sounds pretty convincing to me," Phil said, and went back to the electron microscope.

"Tush," Katherine said. "How about people not wanting to smoke in the dark? Does that prove that the sense of taste depends on sight? I smoke. In fact, you might bring me a cigarette and an ashtray. The only reason most blind people don't smoke is they're afraid of fire." She took the cigarette Phil brought her. "Thanks."

"Aren't you afraid of fire?" he asked.

"Of course not. I can detect a match flame at fifteen feet."

"You ought to go to Duke University sometime and have Rhine take a look at you."

"I did. All he said was 'Hmm,' and I joined the other statistics."

There was silence for a while, interrupted at one point by a muffled "Damn!" from Phil peering into the electron microscope, and the warm sun lay across Katherine's lap. Finally he straightened up and switched off the current. "Well, it's there, all right," he said, and got up and went to the couch and sat at her feet.

"What is?"

"The red shift."

"Aren't you confusing things?" she said. "You're not in the observatory now, Buster; this is the lab. I thought the red shift was the recession of the distant galaxies . . . whatever 'red' is."

"Quite right, Holmes. However, in this case, it's the recession of the not-so-distant atoms. They are

small-sized solar systems, too, in a way, and when I say 'red' I mean something I can only infer mathematically, because I'm not dealing with light in the ordinary sense."

"You mean they're receding?"

"Only in this context," he said. "Motion is length over time; in this case, it's length over hyper-time, so they're still here in the lab."

"I'm relieved to hear it," she said. "However, I should think they'd be receding into tomorrow."

"They are, but into yesterday, and new ones from tomorrow are continually coming in to take their place. It's like Fred Hoyle's theory of the continuous birth of hydrogen."

"You're making me feel like my poor husband," Katherine said. "I understand the necessity of hyper-time to describe the motion of consciousness along time, but what's this got to do with the atoms?"

**T**HREE was a knock at the door and Phil stood up, just as Doctor Russell Chalmers Farley came in without waiting for an answer. Phil and Katherine felt faintly embarrassed — there was scarcely any need to knock on the door to the physics lab; it somehow suggested that the door should be kept open when entertaining callers.

Doctor Farley was a handsome man of thirty-eight with a blond mustache that gave him the look of a Kipling colonial officer.

"Ah, there you are, Katherine," he said cheerfully. "Hello, Kaufman. How's the Research Magnificent?"

"It's begining to show signs of life," Phil said. "I think I can detect a sort of fetal pulse."

Doctor Farley blinked his pale eyelashes and smiled. He sat down at the end of the couch where Phil had been sitting and looked up at him. Part of his charm was that, when he talked to a man shorter than himself, he got below him and looked up. At his evening "sherrries" at home, he had a way of deferring to the newest and least important visitor, who was thus raised to the temporary rank of philosopher, while Russell Chalmers Farley was reduced to the position of listener.

The role of humble servitor of the Truth was his most useful one — it had worked rather well with Katherine, and he had an adroit and imaginative way of expressing his ideas, which usually disguised the fact that they were generally borrowed.

They had met at a street corner in New York City where she was waiting for the sound of traffic to abate so that she could cross. He was on the opposite side, and with his extraordinary eyesight and in-



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tuition instantly recognized that the beautiful, odd-looking girl facing him on the other side of the street was blind. He was at her side before the light — and the sound of traffic — had changed, and said, "I hope you don't think I'm being forward, but let me offer you my arm. Taxis have a way of making illegal turns sometimes . . . "

"You are very kind," she replied, pulling him back from the path of a taxi making an illegal turn. "You have a very nice voice," she said as they got to the other side. "I guess being blind makes one . . . forward!" She laughed and started to walk on.

"No, please wait!" he said, and caught up with her. "I wish you hadn't said that. It can be taken in another way: that I am forward because you are blind. I should like to say that you have a very nice voice."

She stopped and laughed again. "That's one of the nicest things I've ever had said to me!"

"Do let's . . . I mean would you let me . . ." He floundered, and laughed, too. "Can't we have a drink together? Now?"

"I think it would be lovely," she said.

Later on, he said to her, "You may think this impertinent of me, but you make me envy you. If I were braver, I should wish that I were blind. You actually see more than I do."

**K**ATHERINE was intrigued. She had been told this before, but always with mystical and pseudo-religious implications. This man, with the attractive voice and smell, had no trace of the mystic.

"Let me tell you a fable to illustrate what I mean," he went on. "There was a man who was born blind, and he went to work as a coal miner because the darkness was no hindrance to him. One day while he was working alone in an unlighted gallery, his sight was miraculously given to him . . . He shouted out in amazement and awe, and the other miners came stumbling to him in the total darkness.

"'What is it?' they cried. 'What's the matter?'

"'I can see!' he told them. But they were puzzled, for they had brought no lights.

"'What can you see?' they asked. 'There is nothing to be seen here in the dark.'

"'I see black!' he said. 'In front of my face is blackness—however, at the back of my head, I'm still blind and I see nothing.'

Katherine was delighted. "I'm not quite sure I understand."

"Why, to the blind there are no shadows," Farley said. "Another drink?"

"I think it would be lovely," she had said, and since she could see no shadows, she had begun to fall in love.

Doctor Russell Chalmers Farley looked up at Phil and smiled. It was a charming smile and it was as genuine as a guaranteed, ten-carat, real, honest-to-goodness zircon. "As Katherine has probably told you," he said, "what you are doing is completely over my bowed head. I am enormously impressed and at the same time unable to comprehend."

"I find it hard to comprehend, too," Phil Kaufman said. "And I suppose that's what leads me on."

"Well, the thing is," Farley continued, "Washington seems to have gotten wind of it, and you know how they are. They don't like things to be over their heads."

Phil Kaufman looked at him in astonishment and sat on a lab stool. "I don't understand. How can they possibly be interested in what I'm doing? It's purely theoretical research."

"Surely you don't deny that Lisa Meitner's researches began by being theoretical? And look what *they* led to. The point is, Kaufman, that I have been informed that we are about to receive a visit from a man from the A.E.C. He's arriving here sometime this afternoon."

"But that's absurd! I'm not *doing* anything to atoms. I'm merely examining them!"

Katherine frowned when he said this. Phil knew better. Worse yet, so did she.

"When the A.E.C. hears of somebody working in atomic research," Farley said, "they want to know what's cooking. I hate you to be subjected to this, but it won't do any harm to be polite to the fellow and let him, as it were, look over your shoulder."

"I'm damned if I see why I should!" Phil said. "What does he expect to do? Classify me?"

**F**ARLEY laughed placatingly. "I know it seems high-handed, but I think we all ought to remember there is such a thing as Security."

"Security, my foot!" Phil said. "It was that kind of demented thinking that caused Germany to lose Lisa Meitner! *And Einstein*."

"What strikes *me* as rather odd," Katherine said, "is their sending someone here on a Sunday. When did you hear about it, Russ?"

"A little while ago. On the phone."

"Curiouser and curiouser."

"He was very polite and apologetic."

"Quite typical," Phil said. "It's the velvet-glove touch."

Farley looked at his wristwatch. "He won't be here for a while, so I wish you could brief me about the inwardness of what you are doing, Phil." He'd never used his first name before, and Phil became a little wary. "I know you can't give me a ten-year course in advanced

physics this afternoon, but — well, I'd like to know what kind of stand to take. I'll be representing the university, after all."

Phil Kaufman looked down from his perch on the stool at the earnest, kindly face and wondered what really lay behind it. So far as he could see, Doctor Farley had no reason to take any stand on the question at all, except to tell the A.E.C. man to go sit on a tack. If he wanted to represent the university, let him do it in the name of Academic Freedom. Phil glanced at Katherine. She was sitting very still and he had the impression that she was thinking about something else.

"All right, I'll give it a try," he said. "There's an idea that's been around for quite a while that there is an analogy between the stars and the atoms."

Doctor Farley's face lighted. "I believe I've heard of it. Back in the 'twenties, by a man called Dunn, wasn't it?"

Phil shook his head. "Twenty years earlier by a man called Fournier-d'Albe. He wrote a book called *Two New Worlds*, in which he suggested that the solar systems are actually atoms in some vast cloud of super-gas. Of course, this notion ignores the celestial absence of molecular structure — unless you count double stars as molecules — but it might be accounted for by assuming a high

temperature. Then he said that the newly hypothesized Rutherford model of the atom was a sub-microscopic solar system, but he didn't stop there.

"The atoms and their electrons, he said, were in turn made up of sub-atoms and were perhaps populated by sentient beings who looked through their telescopes and counted the atoms in their vicinity, no doubt arranging them into constellations. You can carry this imaginary process in both directions and as far as you like, but are we to decide arbitrarily that it goes on infinitely? Or is it like Einsteinian space, finite but unbounded?

"I have asked myself this question and I believe the latter statement to be in a sense correct, but what does it mean? Well, it means that if you move further and further into larger universes, you eventually get to where you started. Not that Big is the same thing as Small, but that from wherever you happen to be, the ones in the direction — outward — look successively bigger, while the ones in the other direction — inward — look successively smaller. Now if there were some kind of super-telescope that could look beyond our universe of super-atoms, and beyond the next and so on indefinitely, you would find yourself staring up through a super-microscope at your own eye."

"Get along with you!" Katherine said. "This is the pipe dream to end all pipe dreams. Tell us more."

"**W**ELL, I'll revise it to this extent," said Phil. "It wouldn't be your eye that you'd see, any more than you'd see your own face if you looked far enough across ordinary intergalactic space. You'd see the back of your head — or, rather, the other side of the Earth — provided there was nothing in the way."

"And in this case it would be what?" she asked.

"I don't know," Phil said, looking worried. "What is the equivalent of the back of your head — looked at along the direction of hyper-time? Could it be that what you saw would not be from behind, but from . . . inside?"

Katherine's beautiful sightless eyes seemed to be turned inward, and she sat very still. Then she said, "You evoke something in my mind like the echo of a picture I once knew, and will know again."

Farley looked at her sharply.

"You mean something in your subconscious?" Phil asked.

"Perhaps that's what it is, and yet they say that you try to escape knowledge of your subconscious — that it frightens you. I am not frightened, Phil. I feel . . . expectant."

"I'd feel more expectant," he said, "if I were quite sure of what

I was doing. The trouble is that while ordinary light could in theory show you the super-astronomy of the stars and planets that are made up of atoms consisting of our stars and planets, it won't work the other way."

"Why not?" Farley wanted to know.

"Wave length. As it is, we have to use an electron microscope to see the larger molecules; the wave length of visible light is too coarse-grained to show anything that small. So just try to imagine how impossible it would be to see the sub-atoms — infra-atoms — that I'm talking about if one had to rely on ordinary light! The electron microscope wouldn't help, either. It would be exactly as though some gigantic, super-researcher were trying to look at one of our molecules by bombarding it with a shower of planets."

"Then how can you see this 'red shift'?" Katherine asked.

"I can't," he said. "I detect it by a kind of mathematical diagnosis. It's an inferential process — as most forms of observation are, in modern physics."

Farley was looking as intelligent as he possibly could, but it was plain that he was out of his depth. He had heard of the red shift, but he decided he had better not have it explained.

"There's another thing," Phil said. "The time it would take light

to make the round trip of our Einsteinian finite universe would be so great—in the order of  $4\pi \times 10^6$  years—that not only would you not see your not-yet born self, but the Earth wouldn't have been formed either. The light you saw would be that many years out of date. However, in this case the elapsed time would be hyper-time, and you'd be there in ordinary time."

DOCTOR Farley got up and walked to one of the windows and stood looking out at the observatory across the campus. "Am I to understand then," he said, "that you are trying to formulate a new atomic theory?"

"Not in the sense of in any way modifying the accepted one," Phil said. "If I'm right, it will merely be a new way of looking at the Universe as a whole, and it won't have the slightest effect on anything."

"I should have thought," Katherine said, "that being able to see inside one's own head would have all sorts of interesting effects." She got up. "I've got to get back to the house. We've got people coming to dinner, Russ, and I'd better get things organized. Are you coming?"

"I'll be along in a little while, Katherine," he said. "I want to hear more of what Kaufman has to say." He refrained from guiding his wife to the door because of long habit, and again sat down on

the couch. After the door closed, he and Phil listened to her sure footsteps going down the corridor. They looked at one another a little guardedly.

"You know I'm on your side," Farley said when they could no longer hear Katherine's footsteps. "Surely you know I don't like this any more than you do, Phil."

"I suppose you don't."

"You won't mind very much if I ask you a favor, will you?" Farley said. Having asked a rhetorical question, he seemed to be illogically waiting for an answer. Phil was unaware of the chess game, but wondered uneasily what was coming.

"Will you please leave her alone?" Farley said.

"I—" Phil started to say, but Farley held his hand up, palm forward.

"My dear chap, you are one of the most sensitive and kind people I know. But you are a little thoughtless. You imagine that, because Katherine is blind, you are doing her a favor by — by giving her companionship. You feel that her interest in the world can be furthered by your interest in her. This is not the case. I ask you please to leave us alone."

"Us?"

"Yes. You put me in the embarrassing position of having to say that we are very well as we are. I know that Katherine is impressed

by your — your mind, and I know that your sympathy is well-intended, but it is misplaced. She needs no sympathy."

"Why not?"

Doctor Farley spread his hands, a gesture usually meant to substitute for words. "Do the strong need sympathy?"

"I think so," Phil said.

Doctor Farley smiled. "Well, then, think of me as the strong one — the one who needs sympathy as the guardian of something precious. Will you give me your sympathy?" He smiled still.

Phil realized that when the A.E.C. man came — when any pretext presented itself — Doctor Farley would throw him to the wolves.

"Katherine is not in love with me," Phil said.

"But are you with her?"

"No. At least . . . I don't know."

"Then you are."

"Aren't you being a bit old-fashioned?" Phil said.

**F**ARLEY had abandoned his usual pose of sitting and looking up. He looked down at Phil — in fact, he looked down his nose and past his blond mustache.

"I mean," Phil went on, "I think Katherine ought to be the one to decide whether she wants to go on seeing me."

"And I disagree."

"And I," Phil said, "shall stop seeing her when — and only when

— she wants me to! I refuse to be ordered around like this. We're not doing anything wrong!"

"I think you're forgetting—"

"I'm forgetting nothing!" Phil interrupted. "You're acting as though I were having an affair with your wife, and you're trying to pull rank on me! I don't intend to be browbeaten and threatened!"

"I'm not threatening you, my dear man," Farley said, his eyebrows raised. "I ask you as a favor, that's all. I think I know my wife's — mind better than perhaps she does herself. And certainly better than an outsider can."

"And you regard me as an outsider?" Phil's voice was loud.

"You know perfectly well what I mean!" Farley replied angrily. "You are not her husband and consequently do not know—"

"I know her a damn sight better than you do, you stuffed shirt!"

Like most blond men, Farley became red very easily. At the moment, he resembled a tomato with yellow hair. "Why, you little—"

"Really!" At the sound of Katherine's voice, they both swung around. They had been making too much noise to hear her return, and she stood at the open door. "Isn't this a bit undignified?" she said. "I could hear you outside."

Farley was breathing heavily. "What brought you back, Katherine?" he asked, finally.

She walked past them to the

psychiatric sofa and sat on it without answering the question. She looked as though her mind was on something else — and then, suddenly, startled and intent.

*Yes! I am here . . .*

Neither Phil Kaufman nor Russell Farley heard her — they were intent on avoiding one another's eyes, but they would not have heard her anyway.

Q. You were right. He knows where the Unity is — if not what it is, yet.

A. Oh, he will.

Q. Are you so sure? And will you at last admit that we are right? *Unification* — it's the only way . . . now.

A. (she has her face toward the electron microscope; her blind eyes seem to probe it) One cannot impose it on them. What kind of unity can come from imposition?

Q. And are things to go on as they are?

A. No, it's too late. Things have already changed . . .

Q. The history of Man has been the history of his integration — from families to tribes, to communities, to city states, to nations, to hemispheres, to — what next? Is it to stop here, and the hemispheres to beat each other down to the tribal or family level?

A. You will be destroyed in the process.

Q. *We*? In the process of unification?

A. Of course.

Q. And you?

A. I'm always being destroyed.

Q. Ridiculous. Unification can scarcely destroy the Unity.

A. If you unite with Disunity?

Q. The decision has been made: Absorption.

A. By whom? Of whom?

Q. The joining of the collective subconscious to the mutually antagonistic egos of all men. Freud of Vienna had this as a goal — you told us that yourself and I quote it back to you.

A. Or the reverse — men's mutually antagonistic egos in combat with the Unity?

Q. We will take that chance. Now watch — look at the world around you and you will see a dominion of universal brotherhood, the moment Unification is imposed!

A. I will look, but is that what I'll see?

Q. Now! Look!

**S**HE looked at Phil and then at her husband, who looked back at her questioningly.

"You were going to say something?" he asked.

She shook her head, and he shrugged his shoulders.

"This business I'm working on—" Phil began, and hesitated.

"Oh, yes. That reminds me,"



Farley said. "How's the Research Magnificent?"

"It's beginning to show signs of life," Phil said. "I think I can detect a sort of fetal pulse."

Dr. Farley blinked his pale eyelashes and nodded. He sat down at the end of the couch where Phil had been sitting and looked up at him. "Well," he said, "I just thought I'd drop by and see how you were doing. I'll never be able to understand it, though."

"I was going to say, do you think the A.E.C. might conceivably be interested?" Phil said. "After all, it is sort of vaguely connected with atomic stuff."

"I can't imagine why they would be," Farley said, and glanced at Katherine. She had gotten up and was standing at the window.

"The sun's going in," she said, "and it looks as though it may rain. I've got to get back to the house." She turned around with a smile. "How about having dinner with us tonight, Phil? We've got some people coming who'd like to meet you. Don't you think that would be nice, Russ?"

Dr. Farley didn't look as though he thought it would be nice at all, but he said nothing, and neither did Phil Kaufman.

"If you're coming, you'd better straighten your tie," Katherine said. "It's under your ear, as usual."

Phil reached up absently and pulled at it with one hand. "Sorry."

"You put me in an embarrassing position," Farley said. "I think I had better say what I have to say now. Better to have it out, before things go any further."

"Before what things go any further?" Phil asked, with a trace of belligerence. "Of course, if you don't want me for dinner—"

"Wait!" Katherine said in distress. "This isn't . . . But it should be . . ." She looked from one to the other and smiled a tentative, hopeful little smile. "We don't have to go on with this, do we . . . now?"

"What do you mean, 'now'?" Farley said, his face becoming red. "I think it's high time I got this off my chest. Katherine, I don't believe in letting things drift. I want this out in the open!"

*(Oh, but this wasn't the way things were to be! This is all wrong — what can have happened? — There was no answer.)*

PHIL'S face was pale and he started for the door. "I guess I'd better leave you two alone."

"No!" Farley said abruptly. "I want you here! I want you to hear this. Well, Katherine?" He turned to her again.

"I . . . I can't answer you," she said miserably.

"You mean you are in love with him, don't you?" Farley said, with a kind of angry triumph. "All the time, behind my back, you—"

"Dry up, Farley!" Phil said, coming back from the door. "And stop acting like a bully!"

"Why, you —"

The telephone rang, and Katherine picked it up.

"It's for you, Russ," she said, and handed it to him.

"Yes?" Farley snapped into it. "Put him on." He listened for a few moments and his eyes traveled to Phil. "All right," he said. "When do you want to come? — I see. Well, I'll arrange to have him here. Three o'clock tomorrow, then. Right. Good-by." He hung up. "You were right in one respect," he said to Phil. "That was a man from the Atomic Energy Commission and he wants to have a look at what you're doing. He'll be here tomorrow and I shall expect your full cooperation. Sorry, but it can't be helped."

Phil looked at him steadily for a moment. "So that's your way of getting back at me," he said. "Academic freedom means a lot to you! Of all the cowardly, spineless, rotten—"

Farley's face was now dark red and he held up his hand. "That's enough from you!"

"What the hell does he want to come nosing around here for?" Phil said. "My research is purely theoretical—"

"You yourself suggested they might," Farley reminded him. "And don't forget Lise Meitner's work

was theoretical, and look where it led!"

"Very cute!" Phil said. "In fact, Jesuitical! What I'm objecting to is having you dump me in their laps! I know your real motive — it stands out a mile!"

Farley's neck veins became noticeable, but he kept himself in control. "You tend to overrate your position here."

"Hal!" Phil said. "You can't bear me in my position of the man your wife loves!"

Farley's control went and he rushed at Phil and grabbed him by the collar.

"Stop it!" Katherine cried. "Stop it at once! Are you going to act like a pair of apemen? I'm not in love with Phil — I like him very, very much, but it's you I love, you ox!" She pushed and pulled, and they came apart like a bread sandwich, and she got between them. "For heaven's sake!"

"I'm sorry," Farley muttered, and looked ashamed of himself. "I wasn't dumping you into their laps, Kaufman — I had no choice. If I'd objected, they'd have got just that much tougher."

"It's okay," Phil said dispiritedly. "I guess."

"Oh, forget the whole thing, you two," Katherine said. "Come on, we'll be late for dinner." Taking their arms, she led them out onto the campus.

— STEPHEN BARR

# WE NEVER MENTION AUNT NORA

By PAUL FLEHR

*It was only right that he should  
love his country — but did he have  
to try to marry the whole place?*

Illustrated by MARTINEZ

MARY Lynne Edkin brought the man home to meet her brother.

It was uncomfortable for everyone. Mary Lynne's brother Alden looked up from his chair. He snapped his fingers and the sound on the trivision obediently diminished to a merely obtrusive level.

He held out his hand. "Pleased to meet you," he said, but it was obviously a lie.

Mary Lynne got that expression on her face.

"Al," she said dangerously.

Her brother shrugged and snapped his fingers twice more. The set shut itself off.

Mary Lynne's expression cleared. She was not a pretty girl, but she was a pleasant-looking one. The no-midriff fashion was kind to her; she still had a nice figure.

"Al," she said, but smiling now,

"Al, guess what! Jimmy and I want to get married!"

"Oh-ho," said her brother, and he stood up in order to take a better look.

Even standing, he had to look up at this man James Croy. Croy was *big*. Six feet ten or eleven at the least, and his hair was snow white. Still, thought Alden Edkin, the man's face didn't look old. Maybe he was platinum blond. Al snorted, for he didn't hold with men dyeing their hair, common though the practice was.

He asked accusingly, "How come I never met him before?"

"Now, Al —"

"How come?"

Mary Lynne blushed. "Well, Al, there hasn't been much chance for you to meet."

"Oh-ho," said her brother again. "You just met him yourself."

"But I love him, Al!" cried Mary Lynne, clutching at the tall man's arm. "He's — he — oh, I can't explain it. But I love him!"

"Sure you do," said her brother. "You love him. But what do you know about him?"

"I know enough!"

**A**LDEN said sternly, "Family, Mary Lynne! Marriage isn't just between two people. We come of good stock and we can't marry just anybody. Think of the children you may have! Our family—"

"Our family!" echoed his sister. "What's so special about our family? How many times have you said that Aunt Nora—"

"Mary Lynne!" Alden warned. She paused. He said, "No offense, Mr. Croy. But what do we know? You may be after her money, for all we can tell."

The large man cleared his throat and straightened the crease in his Bermudas. He said modestly, "I assure you, Mr. Edkin, I am not interested in money."

"But you'd say that anyhow. Wouldn't you? Not that there's much cash. But there's this big house — Mary Lynne's and mine. And, Mary, you have to think of what Mother and Dad would want. They didn't leave you this big house — it will be yours when I'm gone — so that some adventurer could come along and —"

"Alden!" Mary Lynne was furious. She turned to the man she loved apologetically, but he was merely looking politely concerned. She whirled on her brother. "Apologize to Jimmy!"

There was a marked silence.

"Well," said her brother at last, talking to the wall, "there's one good thing. Being that she's under age, she can't—"

He stopped and waited.

They all waited. The big house that Mother and Dad had left them happened to be on the lip of the takeoff pits for the Moon

rocket. The screeching howl of the night rocket's takeoff rattled the windows and made the trivision set moan shrilly in resonance.

But it only lasted for a few seconds.

"—can't get married without my consent," Alden Edkin finished.

"Alden!" cried his sister again, but it was more a sob than a protest.

Alden Edkin merely looked obstinate. He was good at it.

**J**AMES Croy cleared his throat. "Sir," he said, "I know that what you say is true. We cannot marry without your consent. I hope that you'll give it."

"Don't hold your breath." Edkin sat down and glanced longingly at the trivision set. "As I say, we don't know anything about you."

"That's easily taken care of, Mr. Edkin," said Croy, smiling. "I'm an orphan. No ties, no family. Until recently, I was a draftsman for Amalgamated Luna, in the rocket engine department."

"Until recently? You don't even have a job?"

"Not exactly, sir. But I was fortunate enough to design a rather good firing chamber. They've adopted it for the Mars rocket."

Edkin nodded thoughtfully. "You sold them the design?"

Croy shook his head. "Not outright. But the royalties are — well,

ample. I assure you that I can support Mary Lynne in adequate style. And I should mention that the royalty contract runs for thirty years, with cost-of-living increases."

"Um." Alden Edkin found that he was beginning to relax slightly. This Croy was, in his way, not without a certain charm.

Edkin said in a warmer tone, "Well, money isn't the only consideration. Still . . . Say, what about making some coffee, Mary Lynne? I'm sure our guest would enjoy it."

She looked at him in some surprise, shrugged, patted her proposed fiance's arm and left the room.

Edkin said, "I hope you won't pay any attention to what Mary Lynne said about Aunt Nora."

"Of course not," said Croy and smiled. He had a very nice smile. His eyes were deep-set, somber and serious, and the smile beneath them was like sunlight bursting out from under a cloud.

Edkin was momentarily dazzled. He shook his head to clear it; for a second, he had almost thought he could see *through* the man. But that was nonsense.

Croy was saying, "I don't drink coffee, Mr. Edkin, but I'm glad Mary Lynne's out of the room. I hope we can get better acquainted."

"Sure," said Edkin testily. "Well, sit down and tell me something

about yourself. Where was your family when you had one?"

"We're originally from Portland, Mr. Edkin."

"Portland, Maine? Say, I was stationed near Presq' Isle when I was in the Army."

"No," said Croy regretfully, "Portland, Oregon. After my parents passed away, I attended several schools, graduating from the University of California."

"Oh, we know lots of people there!" exclaimed Edkin. "Our cousins on my mother's side have some friends who teach at Berkeley. Perhaps you know them—Harold Sizeland and—"

"Sorry," Croy apologized. "I was at the Los Angeles campus. But let's not talk about me, Mr. Edkin. Mary Lynne tells me you're in credit maintenance."

"That's right." Actually he was a loan collector; it was close enough.

**C**ROY leaned confidentially closer. "You can help me, Mr. Edkin. I'm planning a sort of surprise for Mary Lynne."

"Surprise?"

"Here," said Croy, reaching into his pocket. He pulled out several sheets of legal cap, stapled into a blue folder. "Since you're in the financial line," he said, "you'll know if this is all right. What it is, it's a kind of trust agreement for Mary Lynne."

Edkin scowled. "You're taking a lot for granted, Croy. I haven't agreed to anything."

"Of course not. But won't you look this over for me? You see, it puts all the royalties from my firing chamber in her name. Irrevocably. So that if anything happened to me, or there was, well, anything serious—" he didn't say the word "divorce," but he shrugged it —" she'll be well provided for. I'd appreciate your opinion of the contract."

Edkin glanced at the papers suspiciously.

He was ready to stand up and order from the house this brash young giant who interrupted his trivision programs and proposed to carry off his sister. But something hit him in the eye. And what that something happened to be was a neatly typed line specifying Mary Lynne's guaranteed minimum annual income from the trust agreement.

Thirty-five thousand dollars a year.

Edkin swallowed.

Attached to the certificate of agreement was a notarized copy of the Amalgamated Luna royalty contract. Unless it was a fake, the thirty-five-thousand-dollar figure was exactly right.

Mary Lynne came back into the room, and nearly dropped the coffee tray.

"Hi there, Mary Lynne!" greeted

her brother, looking up from where he was patting Croy on the shoulder. "Coffee, eh? Good!"

She stared at him unbelievingly. He bobbed his head, winked conspiratorially at Croy, jammed the papers in his pocket and stood up.

"Coffee, eh?" he repeated, carrying chairs toward the table. "Your young man won't drink it, Mary Lynne. But surely he'll have some cake, eh? Or a drink? Some tea? Perhaps a glass of chocolate milk — Mary Lynne will be glad to warm it. No?"

He shrugged and sat down, smiling. "No matter," he observed. "Now tell me. When would you two lovebirds like the happy event to take place?"

THREE days later, the marriage was performed. It was the minimum legal waiting period.

Alden Edkin, as it happened, was a bachelor who believed that every man who glanced at his sister was a prospective rapist — and that those who proposed marriage were after her money besides. Still, he was not an idiot.

He had taken certain precautions.

First, he took a copy of the trust agreement to Mr. Senutovitch in his company's legal department. Mr. Senutovitch read the papers over with real enjoyment.

"Ah, bully stuff, Edkin," he said sentimentally. He leaned back and gazed at the ceiling while the arms of his reclining chair sighed faintly and adjusted to his position. "It's a pleasure to read the work of a master."

"You think it's all legal, Mr. Senutovitch?"

"Legal?" Mr. Senutovitch coughed gently. "Did you notice the classic language of the operative clause? That's Paragraph Three: 'Does hereby devise, grant, give, bestow and convey, without let or restraint, absolutely.' Oh, it's a grand piece of work."

"And irrevocable?"

Mr. Senutovitch smiled. "Quite irrevocable."

"You're sure, Mr. Senutovitch?"

The lawyer said mildly, "Edkin, I wrote this company's Chattel Lien Form. I'm sure."

The other precaution Edkin took was to drop into his company's Credit Reference Library and put through the name of Croy, James T., for a report.

It would take a few days for the credit report to come through, and meanwhile the ceremony would be performed and the couple off on their honeymoon. But at least, Edkin consoled himself, when it did come through, it would be a comprehensive document. The company took an expansive view of what a credit report should cover.

The company, moreover, was not to be deceived by any such paltry devices as a change of name—or, for that matter, of fingerprints, retinal patterns or blood type. If a man could change his basic genetic construction, he might fool the company, but not with anything less; the Credit Reference Library was hooked in by direct wire with the F.B.I. office in Washington — for the convenience of the F.B.I., not of the company. There would be no secrets left to Mr. Croy. And therefore no secret worries for Alden Edkin.

And then Edkin stood by, fighting a manly urge to weep, as his sweet young sister gave herself in wedlock to this white-haired giant with the deep, penetrating eyes. The ceremony was performed before Father Hanover at Trinity Episcopal Church. There were few witnesses, though Mr. Senutovitch showed up, wrung the bridegroom's hand warmly and left without a word.

**I**N the empty house, Alden Edkin took a deep breath, let it out, and put through a phone call to their only surviving relative. It was the least he could do.

A plump face over the fur collar of a lounging robe peered out of the phone's screen at him.

"Aunt Nora?" said Edkin tentatively. "My, you're looking well."

"You lie," she said shrilly. "I

look old. What do you want? If it's money, I won't give you a—"

"No, nothing like that, Aunt Nora."

"Then what? You sorry you threw me out of the house twenty years ago? Is that what you called up to say?"

"Aunt Nora," said Edkin boldly, "I say let bygones be bygones. I called you up to tell you the news about Mary Lynne—my sister—your niece."

"Well? Well? What about her?"

"She just got married, Aunt Nora," said Edkin, beaming.

"What about it? People do, you know. There's nothing strange."

Edkin was shocked. Such a lack of family feeling! And from her, who should feel herself lucky beyond imagining that anyone in the family called her up at all. He was angry enough to say what he had vowed he would never refer to.

"At least," he said icily, "she got *married*."

Pause.

Thinly: "What do you mean by that?"

"You know perfectly well, Aunt Nora."

In the tiny screen, her face was a doll's face, an angry doll; it flushed red. She must have been shaking the phone, Edkin thought distractedly; rings of color haloed the edge of the screen.

She cried, "You're a sanctimonious jerk, Alden Edkin! You for-



bade me to associate with your sister—my own niece!—so I wouldn't corrupt her . . . when she was three months old and the good Lord Himself couldn't corrupt her, because she didn't so much as know which end was up! And now, just because she's getting married, you call me up. Hoping, no doubt, that because I'm getting old and absent-minded, I'll send along a little check for ten thousand dollars or so as a wedding present. Well, you're wrong! If Mary Lynne wants to call me up, I'll talk to her — but not to you! Understand?"

And the little screen flashed red and orange as she hung up.

Edkin pushed down the off button and shrugged. Aunt Nora! Who could account for her moods? A product of her sordid past, of course, but — It had been a mistake to call her up. Definitely.

Virtuously, Alden Edkin went to bed.

The following morning, he got the report from the Credit Reference Library. It had received special priority. The paper it was typed on flamed with warning red.

**A**LDEN Edkin was waiting at the airfield when the honeymooners returned from their Grand Tour.

He had been champing at the bit for six weeks — six long weeks and not a word from them, six

weeks when they were out of touch with the world. Because they wanted it that way!

It was Alden Edkin's conviction that he knew *why* James Croy wanted it that way. He stood there by the customs gate, grinding his teeth, a plump angry man with a face that was rapidly turning purple.

He saw them coming down the wheeled steps from the plane and he bawled, "Mary Lynne! Mary Lynne, come down here this minute! Get away from that monster Croy!"

Mary Lynne, her arm adoringly on the arm of her husband, shuddered. "Oh-oh," she muttered. "Storm clouds rising. Batten down all hatches."

Croy tsked solicitously. "Poor man, he's upset, isn't he? But you mustn't worry."

"I'm not worried, darling." "Of course not, of course not. Trust me." Croy nodded approvingly. "I've got to stop off for a second. A little errand—But I'll be right back and then I'm sure we can straighten out whatever's troubling your brother." Gently he kissed her ear. "My darling," he whispered, soft as a moth's wing.

And then that perfect gentleman, James Croy, bowed to the brother-in-law who was raging impotently across the customs gate, turned on his heel and disappeared into the men's room.

The men's room had a North Entrance, a South Entrance, a Mezzanine Entrance and a Service Entrance to the floor below. It is not a matter of record which door Croy used to come out, but it was not the one by which he had gone in.

THE policemen finally went away. "Sorry," said the sergeant, curt and somewhat bored—he had been with Missing Persons for a good long time. "Probably he'll turn up."

But it wasn't true, and both he and Alden Edkin knew it. And when he had left, Edkin told his sister what the red-bordered credit report had shown.

Across the top was printed in bold letters *Zero Credit Rating Zero.*

"You can't fool Consolidated Credit," snapped Edkin. "They know. And this man Croy — why, he's a monster, Mary Lynne! He preys on women."

"Oh, no," wept his sister. But she was already in her heart convinced.

"Oh, yes! He is! Listen to this! Four years ago, in Miami, he married a girl named Doris L. Cockingham. There's no record of a divorce! He just married her—set up a trust for her with the royalties from an electric underwater lung, left her pregnant and disappeared. Eh?"

"I don't believe you," sobbed his sister.

"Then listen to this! Eleven months later, in Troy, New York, he married Marsha Gutknecht. Revolting! Can you understand a man like that? Loose morals, bigamy—why, he'd never get credit with a record like that."

"There must be some perfectly simple explanation," whimpered Mary Lynne. "When Jim comes back—"

"He won't be back!" said her brother brutally. "Get used to that idea, Mary Lynne! The Gutknecht woman never saw him again, and she was pregnant, too. He meant to run away! He used false names. Told different stories to each of them. But he couldn't fool Consolidated Credit. He put four hundred thousand dollars in trust for this woman and took off and never gave her another thought. How do you like that, Mary Lynne?"

"Jim wouldn't—"

"Jim did! And again the following year. Whitefish Bay, Wisconsin — a girl named Deloris Bennyhoff. Then in Jim Thorpe, Pennsylvania—" He crumpled the paper in rage. "Ah, what's the use? Five women! He married them, runs off, leaves them pregnant. And what do you have to say to that, Mary Lynne?"

Mary Lynne looked at her brother through blurred eyes.

In a faint, faint voice, she said,

"Well, at least he runs true to form, Alden."

**O**H, they looked for him. But they couldn't find him. The police couldn't find him, private detectives couldn't find him, even Consolidated Credit couldn't find him. Jim Croy was gone — probably forever, at least under that name. And while they were looking, events took their natural course, and Mary Lynne made reservations at the hospital and began to pack a little bag.

And Aunt Nora phoned.

Her plump face peered somberly out of the phone screen. "I'm coming east," she announced.

"You're not!" croaked Alden, wincing already. "I mean—"

"Thursday," she said. "On the six o'clock plane."

"But, Aunt Nora—" It was the last thing he wanted! So many years of cutting her out of the family circle because of the indiscretion of her youth, and now—

"Meet me," she said, and hung up.

There was nothing to be done about it. Aunt Nora showed up at the house her sister had left the children just as Mary Lynne gasped, checked her wristwatch, gasped again and reached for her ready-packed bag.

"Hello, Aunt Nora," said Alden distractedly. "Mary Lynne, aren't you ready yet? Good-by, Aunt

Nora. Make yourself at home."

"Wait!" cried Aunt Nora, but she was talking to a closed door.

She sighed, shook her head irritably and took off her coat. Men were so foolish about babies! There would be plenty of time; she would unpack her bag, get settled in, and then, with full leisure, proceed to the hospital. And she was willing to bet that she would be there well before the baby arrived.

She was right — though what she found in the upper bureau drawer of her room made her hurry to the hospital sooner than she'd planned.

"Alden!" she gasped. "The picture! I saw the picture—"

"Hello, Aunt Nora," said Edkin gloomily. "Lord, but this takes a long time!"

"It just seems long," snapped Nora and waved a picture under his nose. It was inscribed in white ink: *For Mary Lynne, from Jimmie, with love. Who's this?*"

Edkin said guiltily, "Mary's — ah — husband. He's away just now."

"I bet he is! That's not any Jimmie! That's Sam!"

"Sam?"

"My Sam. The one who left me in a delicate condition years ago! And the only difference is, now he marries them!"

Alden, hardly listening, said soothingly, "That was a long time

ago, Aunt Nora. We don't worry about it now. Besides, you gave the baby up for adoption, didn't you? I never even saw him — or her? What was it, a boy?"

She said shortly, "No."

"A girl, then."

"Guess again," said Aunt Nora in a more peculiar tone. "And it wasn't exactly adoption."

Her tone was peculiar enough to attract his full attention. He looked at her queerly, but she didn't seem to be joking. Funny.

He didn't have the faintest idea of what she meant—

Until an endless twenty minutes later.

Until the white-faced nurse came out of the delivery room wheeling a bassinet; until, without a word, the nurse pointed a shaking finger, and Edkin saw what it was that his sister had — with the help of what called itself James Croy — brought into an unsuspecting world.

— PAUL FLEHR



## FORECAST

One way to describe next month's novello, *TO MARRY MEDUSA*, is the way its author, Theodore Sturgeon, does: a pursestring plot that snaps shut at the end. But Sturgeon is a modest man and his is a too modest description. What *TO MARRY MEDUSA* really is is a dazzling pattern of high-voltage wires with a shock at each connection — and a solar flare when the master switch is pulled. It has perhaps the most appallingly unlikely and bitterly unwilling hero in all literature, working for the most wrong-headed reasons on the wrongest possible side — to the problem that the human race is complex, it applies the absolutely literal answer: put the problem in a nutshell — and this is just the organization to do exactly that!

Since this is an outsize novello, only one novelet can be scheduled for certain, though another may fit in somehow. In his novelet, Paul Flehr is forced to grant that every frontier in history was raw with violence, and that there is no basis for supposing interplanetary frontiers will be otherwise—but with fares so high and colonists so scarce, he refuses to concede that there is no alternative to killings and lynch law—for example, ruthless enforcement of the *SEVEN DEADLY VIRTUES*.

Short stories and features, to be sure, and Willy Ley gives, *FOR YOUR INFORMATION*, an intensive course on "How to Get Around on Other Planets." Some types of locomotion that have long gone unquestioned are given a very thorough questioning — and end up on the junkpile before they have a chance to do some to their crews. But Ley doesn't let his explorers walk back across alien landscapes; he provides transportation that may be somewhat startling but makes better sense.

for  
your  
information

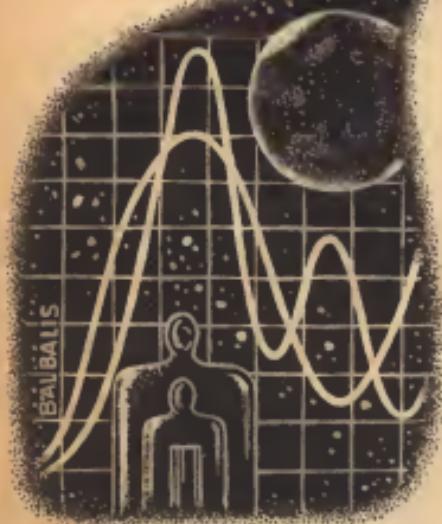


BY WILLY LEY

### IGY ROUNDUP

**T**HIS piece was originally meant to be entitled "Half a Year of IGY" or "The First Six Months of the IGY" or something to that effect. The fact that the actual writing was delayed to the fourth of February makes a title change mandatory. It has to be "The First Seven Months of the IGY." I can't leave *Explorer* out.

As regards *Explorer*, I have to confess that the day of Friday, the 31st of January 1958, made me



feel somewhat like Phileas Fogg after his return to England, before he realizes the useful mistake he made. Through the months of December 1957 and January 1958, I was subjected to more than the customary number of radio, television and newspaper interviews, not to mention countless private questions. They all dealt with Vanguard, which had just suffered the most publicized failure of any rocket.

What people wanted to know was:

- (1) What happened to Vanguard?
- (2) Why was it publicized so much?
- (3) How many failures did the Russians have before they got Sputnik I into an orbit?
- (4) What were the chances of Jupiter?

MY answers, naturally, were my own opinions and not those of the network or of the managing editor. And they ran as follows:

Question No. 1. After having watched the films taken of the takeoff that miscarried, I felt my first impression on hearing the reports more or less confirmed.

The films showed clearly that the rocket motor of the first stage burned well and that the rocket lifted. Just after lift-off, when it was roughly one yard above the

launching table, something shot out of the tail and accompanied by flame; simultaneously, the exhaust blast of the motor seemed to weaken. It was not longer strong enough to carry the rocket, so the rocket settled back on its tail. Naturally it did not settle back to fit the launching table precisely. It split open, fell over and the fuel exploded.

My first impression had been that the fuel pump was stuck and that this ruptured a fuel line. (This happened to several V-2s in Germany and to at least one V-2 at White Sands, but at a high altitude.) It has been stated officially since then that the cause of the mechanical failure is now known, but it has not been said officially what it was. At any event, it was a loss of power, just at the most critical moment, due to a mishap in the motor compartment.

Question No. 2. The reason why Vanguard was publicized so much was paradoxically due to secrecy. As everyone knows, the Defense Department, during the years when Charles Wilson made all the many decisions stamped "I am twice as bright as anybody else," suffered a very acute attack of juvenile super-secrecy. Nothing was to be published about missiles. Not even their names were to be made known — of course, you could always read British aviation publications and find out what you

wanted to know — and, in general, the taxpayer was not to be informed what was done with his money. Or whether anything was done with his money.

But it had also been decided that firing an artificial satellite by means of a military missile would "make a bad impression." For this reason, Dr. Wernher von Braun's original Project Orbiter was scrapped and "the peaceful rocket" of Project Vanguard was substituted. This put the first American satellite into space roughly two years later than would have been the case if Project Orbiter had gone ahead.

But the other side of the coin was — hurray, hurray — that Vanguard was *not* a missile. In fact, the Navy always referred to it very carefully as a "vehicle" and the Navy Public Relations officers then found out that most citizens considered a "vehicle" something in which a man rides. Hence they wanted to know what sort of man would ride the Vanguard. They wanted to know whether somebody had already been picked. And the Navy's public relations men had to explain over and over again that the "passenger" was to be a ball of instruments weighing 21½ pounds.

**T**O return to the theme: Vanguard was not a missile, so it was not classified. It could be

talked about. Some technical detail was not revealed, but a newsman of any kind — radio, television or newspaper — who wanted to know something about rockets, since he had to fill time or space, would be waved into a chair and told: "Now you realize, of course, that missiles are under wraps. Missiles cannot, repeat NOT, be discussed. But the satellite project — Vanguard, that is — is not classified in that sense. So ask me anything you want about Vanguard and I'll tell you."

Thus Vanguard, for about two years, got all the publicity that would normally have been spread over a dozen different projects. And since everybody had been whipped into expecting wonders of Vanguard, the disappointment was obviously severe. Under normal conditions, the failure would have been just a plain failure. Such things will happen; on to the next test. But only Vanguard had been talked about — and there were two Russian sputniki (that's the correct plural) overhead. Which brings me to:

Question No. 3. Of course the Russians, having an enormous land area, a political dictatorship and a secret police, could have hidden any number of failures. But when asked directly whether the shot that put Sputnik I in orbit had been the first attempt, they said that it had been.

I may say here first that the scientists of all nations had been furnished with a date for the firing in about May 1957. The Russian rocket experts had started hinting very broadly that the year 1957 was not only the beginning of the International Geophysical Year but also the centenary of the birth of the great Russian rocket pioneer Konstantin Eduardovitch Ziolkovsky. Furthermore, they were planning a celebration worthy of the memory of a rocket pioneer.

The date was September 17, 1957—when Ziolkovsky was born, the registrar noted his birthday down as September 5, 1857. But that was old style, the Julian calendar, and the Soviets have switched to the Gregorian calendar used by the rest of the world. So, to many people, the surprise was not that it happened at all, but that it did not happen on September 17. I wondered for several months whether they had tried on September 17 and failed, or whether they simply did not get ready until October 4, the date of the actual shot.

Of course I don't know. But the Russians said that their first shot succeeded. Offhand, there is no reason why one should not believe this statement. They used a production missile, the one they call the T-2, which is a two-stage liquid-fuel job. They put a third

stage, almost certainly solid fuel, on top. In a production missile, the bugs which once inhabited it have been frozen or burned out before it became a production missile. Hence, if it is in production, a failure would be a surprise rather than the other way round. It was this reasoning which caused me to be very optimistic about:

Question No. 4. The Jupiter-C missile is a production missile too. At least its components are. The first stage of the Jupiter-C is a Redstone liquid-fuel rocket. The second stage is a ring-shaped cluster of a well-tested solid-fuel rocket, called *Recruit* (because it is a scaled-down *Sergeant*). The third stage is a smaller cluster of *Recruit* rockets placed inside the ring-shaped cluster which is the second stage. The fourth stage, finally, is a single such rocket, sitting more or less on top of the third stage.

So I assured everybody who asked me that Jupiter would jump into space in January. Naturally I felt like Phileas Fogg on January 31st. Then I was rescued like Phileas Fogg. Jupiter did jump into space, still in January. The takeoff time was 10:48 P.M. A wire service rang me up at a few minutes after midnight to tell me about it. And on the following day, I sent a wire to Wehrner von Braun, congratulating him and thanking him for having kept me

an honest man by the margin of one hour and twelve minutes.

Of course, during the time that goes by between the writing of this column and its appearance on the newsstands, you must have read about all the things that *Explorer* did find out. I just want to point at one early item, its internal temperature.

The space travel men had said for years that the temperature in the cabin of a spaceship near Earth would be about 70 degrees Fahrenheit. This figure was based on heat received from the Sun only and did not take into account how much additional heat would be generated internally by hot filaments in instruments and by the people. It also did not take into account the heat the ship would receive by reflection from the Earth when it was above the day-side of the Earth — between Earth and Sun, that is. Calculated in, this was expected to add between twelve and fifteen degrees.

*Explorer* has reported that its internal temperature varies from 50 degrees to 85 degrees Fahrenheit. Accurate predicting, eh?

**B**UT let's go on to other IGY activities now. And this time we really talk about the first six months because no later reports are in.

It must be said that Nature co-operated beautifully.

The first day of the IGY was July 1, 1957.

On June 28, 1957, there was an exceptionally large solar flare. The disturbance caused by that flare reached the Earth on the first of July.

Light from a solar flare needs only eight minutes to reach the Earth. Astronomers of Krasnaya Pakhra Observatory in Russia saw the flare first and reported it to IGY headquarters in Brussels. IGY headquarters declared an "alert" one day before the official beginning of the IGY. The disturbance caused by a solar flare shows mostly as a disruption of long-range radio communications.

Normally there are several ionized layers in the ionosphere (above 40 miles from the ground) which are used as "mirrors" to reflect radio waves of different wave lengths from the point of origin to the target. After a solar flare, this does not work for a while. The radio waves do not come back. Were they simply let out into space or were they absorbed? The latter was more likely by far, but one could not be absolutely certain.

On July 4, 1957, a research rocket was fired through the ionized layers to find out. The rocket reported that there was an additional ionized layer, extending to twelve miles below the lowest normal layer. The rocket also reported that there were no changes

in the distribution of the ionized layers otherwise. The disruption of communications was due to the temporary formation of this extra-layer, below all the others. At a later solar flare — to the eye, a solar flare is just an exceptionally bright spot on the face of the Sun — another rocket could establish that the extra layer was caused by X-rays coming from the Sun.

One of the things which scientists had never been able to answer was whether there was a "bipolarity of the auroras." Everybody has seen pictures of an aurora. If they occur near the magnetic pole in the north, they are called *aurora borealis*; if they occur near the opposite pole, they are called *aurora australis*. Now the auroras, all available evidence said, were also caused by solar activities. But if it was the Sun that caused an aurora, it should take place simultaneously at both poles — it should be "bipolar."

All very logical, but was it?

The difficulty was that one pole has daylight when it is night at the other pole. You probably could not see an aurora in bright sunlight, increased by the glare from the snow on the ground, even if one took place. Moreover, you never had observers both in the far north and in the far south at the same moment.

But, during the IGY, you do have observers all over. And they

were aided by new instrumentation which would have sounded like magic in the days of Nansen. Now proven: the aurorae are bipolar.

**M**UCH attention was devoted to something that few people even knew existed, the so-called "whistlers." The whistler can be heard only with radio equipment; it is one more radio disturbance, this time of the low frequencies.

The origin of a whistler seems to be a stroke of lightning. The Earth is large enough for about a thousand thunderstorms to go on at any given moment, so there is no shortage of lightning strokes. But obviously not every stroke produces a whistler. Only occasionally is the wave which is originated by the lightning capable of penetrating the reflecting ionized layers of the upper atmosphere.

When one does, the resulting and rather faint disturbance travels back and forth between the northern and the southern hemisphere. It travels in space, outside the ionosphere, and it does go very far out, judging by the time that elapses. The whistlers must travel along the so-called magnetic lines; more precisely speaking, they travel through an arc along which the intensity of the Earth's magnetic field remains the same.

Could the "whistler effect" be used for communications at times

when solar flares produce this extra layer which ruins the customary method of radio communication? There is no answer to this question yet, but by the end of the IGY we may know.

Still staying at the fringes of the atmosphere, another phenomenon has to be discussed. The two principal gases of our atmosphere are nitrogen, not quite 80 per cent, and oxygen, around 21 per cent. The little difference indicated by the words "not quite" is argon, neon, krypton, xenon, helium and hydrogen, all together amounting to roughly one per cent. On occasion, you can read somewhat different figures; for some purposes, it is more convenient to list the weight rather than the volume. Here is a comparison of both:

	volume per cent	weight per cent
Nitrogen	78.03	75.514
Oxygen	20.99	23.147
Argon, etc	.94	1.292
CO <sub>2</sub>	.03	.046
Hydrogen	.01	.001

The point this table makes is that the various gases have different specific gravities. A cubic yard of oxygen does not weigh quite the same as a cubic yard of nitrogen. A cubic yard of hydrogen would be much lighter than either, and a cubic yard of carbon dioxide much heavier than anything else

that exists in the atmosphere.

If the atmosphere were, or could be, completely at rest, the various gases could be expected to separate into layers. Of course the atmosphere is not at rest; it is warmed by the Sun on one side and radiates its heat into space on the other. It circulates, mixes and travels about.

**O**RIGINALLY the idea of separate layers just did not exist. But some sixty years ago, when more about the higher levels of the atmosphere became known by way of balloon flights, it suddenly looked as if all the turbulence was confined to the first six miles or so. The French scientist Léon P. Teisserenc de Bort even coined the name stratosphere for the "upper air" because up there the air seemed to be stratified.

Some years later, between 1915 and 1925, you could find neat diagrams of the atmosphere, all based on the idea that the gases should separate according to their specific gravity. No layer would be perfectly pure, but as you went up the percentage of helium should increase, for example, and the percentage of hydrogen with it. In fact, there probably was one pure layer, namely an outer hydrogen layer.

Here we had a case of logical reasoning which did not seem to hold true in reality, for the first

V-2 rockets thoroughly ruined the whole concept. Eighty miles up, the composition of the atmosphere was still the same as near the ground. Naturally the density had dropped to almost nothing, but the composition of the little there was corresponded with what you could measure one mile up. No layering.

This dictum was firm and definite as of January 1, 1957. On January 1, 1958, it was not so firm any more. An IGY research rocket, fired from Fort Churchill in Canada in late summer 1957, carried a device for analyzing the composition of the air. The still somewhat tentative result is that the air is completely mixed up to sixty miles. But above sixty miles there were faint indications of separation according to the specific gravity of the gases involved.

The attempt to measure this brought up the question of what is "normal" density at high altitudes. A series of Aerobee and Nike-Cajun rockets was fired from Fort Churchill for just this purpose. The rockets, going as high as 120 miles, reported all kinds of effects which could not be detected on the ground.

It seems that one cannot ask about the "normal" density a hundred miles up without specifying quite a number of things. This density is not the same during the day and the night. It is not the

same on the first of August and the first of December. And it is not the same, on the same day, under 30 degrees of northern latitude and under 60 degrees of northern latitude.

Density of the atmosphere at very high altitudes, then, is influenced by the geographical latitude, the season of the year and, most especially, the time of the day.

LET'S come out of the atmosphere now and put our feet on the ground. Or rather on the ice, because we have to talk about Antarctica next. Even though Antarctica is almost "settled" by IGY stations (I count 38 on my check-map, run by, in alphabetical order, Argentina, Australia, Chile, England, France, Japan, New Zealand, Norway, USA and USSR), the results must be spotty, for the Antarctic ice sheet measures six million square miles.

A number of soundings have shown that the ice extends to below sea level where "land" was expected. Still, the experts are careful not to conclude that Antarctica is really an archipelago which is tied together by ice. The drilling may just conceivably have hit a frozen fjord.

The geography of Antarctica is still quite uncertain, but we are making progress. But the end of the IGY, we may have a reasonably good map. Or at least one

that is good enough to serve as a guide to further studies.

Something quite unexpected has shown up at the other end of the globe, the polar sea. Several stations in the western hemisphere are involved, most of them Canadian, one or two Norwegian, one American. The stations on the other side of the Arctic Ocean are Russian, of course.

One day, one of the Canadians noticed a sea level rise of about four inches which could not be accounted for by tides or anything known. He first checked with his colleagues in the western hemisphere. Yes, they had observed it too. Then they checked with the Russians, who had looked at the same thing with amazement. But there was a difference in time. The sea level rise on the Russian side did not take place at the same time as it did on the American side.

The phenomenon may be compared with the motion of the water in a round washtub that has been shaken. The water first laps up on one side and then travels to the opposite side. Then it comes back. Naturally it takes many hours for a basin as large as the Arctic Ocean.

Nobody has any idea of how this can be explained. The main problem is that it is a newly observed phenomenon. We don't know whether it existed in the past. We don't know whether it was

stronger in the past or weaker. If we knew when it started, it might tie up with a major volcanic catastrophe. But we don't know. It is something to be watched for a long time to come.

Another surprise that turned up in the oceans — in the Atlantic Ocean, in this case — is something that might be called a Counter Gulf Stream.

The work was done by two oceangoing laboratories, the *Atlantis* (U. S. A.) and the *Discovery II* (Great Britain). They investigated the eastern edge of the Gulf Stream which flows in a general northeasterly direction. They found that, at a depth of 6500 feet below the Gulf Stream's eastern edge, the water either shows no movement at all or else that the movement is very erratic, the equivalent of a turbulent zone in the air. But at 9000 feet there is a current flowing opposite to the Gulf Stream on top, at the rate of eight miles per hour, which is rather fast for an ocean current.

**N**OTHING on such a scale has yet been reported from the southern Atlantic Ocean, which is under investigation by the *Vema* (U. S. A.) and the *Bahia Blanca* (Argentina). But the *Vema* could report something new in the biological field. They recovered — alive — a small shellfish and a worm one-quarter of an inch in

length from depths of 13,200 and 16,200 feet, respectively. This is believed to be the greatest depth from which living organisms have been brought up so far, alive or dead.

About 200 IGY stations occupy themselves with measuring sea level and tides. It is possible that, with the change of the seasons, very large amounts of sea water shift from the northern to the southern hemisphere. But, so far, only one change of seasons has been observed and that incompletely. Which is, incidentally, the reason why the IGY runs through eighteen months—all observations can be made through overlapping seasons.

Well, this is about what is now known. The full results of the IGY will not even be known at the end of the IGY because it will take years to correlate all the information gathered and to interpret it correctly.

It is quite possible that impor-

tant discoveries have already been made, needing only time and study to be found and confirmed.

Both in the Arctic and in Antarctica, long "cores"—samplings of ice from great depths—have been taken. The forty-odd research vessels engaged in the program have taken large quantities of samples of bottom mud from all the oceans. Observatories, stations, ships, rockets, balloons, instruments and human watchers are amassing mountains of data that must be broken down, analyzed, tested, compared, checked and rechecked. And some, like the photographs of Pluto made years ago, will have to wait for theory to point the way to their true significance.

There is no way of prophesying how many scientific papers and books in the future will begin with the words: "It was first noticed during the IGY that . . ." but it's certain that the number will not be small.

— WILLY LEY

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## MAN IN A QUANDARY

By L. J. STECHER, JR.

*If you were in my — well,  
shoes, if you don't mind  
stretching a point — what  
would you do about this?*

DEAR Miss Dix VI: I have a problem. In spite of rumors to the contrary, my parents were properly married, and were perfectly normal people at the time I was born. And so was I — normal, I mean. But that all contributed to the creation of my problem.

I do not know if you can help me resolve it, but you have helped so many others that I am willing to

try you. I enjoin you not to answer this letter in your column; write me privately, please.

You know all about me, of course. Who doesn't? But most of what you know about me is bound to be almost entirely wrong. So I will have to clarify my background before I present my problem.

Know, then, that I am Alfred the Magnificent. It surprises you,

Illustrated by MARTINEZ

I imagine, that I would be writing a letter to Miss Dix VI. After all, in spite of the tax rate, I am one of the richest — I will say it! — one of the richest *men* in the world.

Every word of that last statement is true. My parents were enormously wealthy, but I have accumulated even more of the world's goods than they ever did. And if they had not been loaded with loot, I would not be here now to be writing this letter to you.

Please excuse any lack of smoothness in the style and execution of this letter. I'm doing this all myself. Usually I dictate to a secretary — a live secretary — but you understand that that would not be advisable for a letter of this kind, I'm sure.

**S**O. My background. I was born in 2352 and, having passed my infantile I.Q. test with flying colors, was admitted to the Harvard Creche for Superior Children at the usual age of three months.

The name of Alfred Vanderform naturally had been entered on the rolls much earlier. Ten years earlier, in point of fact. My parents had been fortunate enough to be selected to have three children and I was to be their first. They chose to begin with a son. They had known that they would be chosen, and that I would be a superior child, and had taken the wise pre-

caution of signing me up for Harvard Creche as soon as the planners had finished drawing up their preliminary charts.

In spite of what you may have heard, there was absolutely no chance of falsifying the initial I.Q. examination; in those days, at least. I was a physically normal, mentally superior child. My progress at the creche was entirely satisfactory. I was an ordinarily above-average genius in every way.

At age six, I left the creche for my sabbatical year at home with my parents, and it was there that my first disaster occurred.

My mother and father moved into the same house while I was there, which was the custom then (and may still be, for all I know) in order to provide a proper home-like atmosphere for me. Through some carelessness in original planning, this was also the year that had been selected for the birth of their second child, which was to be a girl. Both parents were to be the same for all three of their children. Under usual circumstances, they would have paid enough attention to me so that the disaster would never have been allowed to take place, but plans for their second child must have made them a trifle careless.

At any rate, in spite of my early age, an embolism somehow developed and major damage to my heart resulted. It was here that the

great wealth of my parents proved invaluable.

Prognosis was entirely unfavorable for me. The routine procedure for a three-offspring couple would have been to cancel the unsuccessful quota and reissue it for immediate production. However, it was too late to arrange for twins in their second quota and my parents decided to attempt to salvage me.

An artificial heart was prepared and substituted for the original. It had a built-in atomic battery which would require renovation no oftener than every twenty years. Voluntary control was provided through connection with certain muscles in my neck, and I soon learned to operate it as least as efficiently as a normal heart with the normal involuntary controls.

THE mechanism was considerably bigger than the natural organ, but the salvage operation was a complete success. The bulge between my shoulder blades for the battery and the one in front of my chest for the pump were not excessively unsightly. I entered the Princeton Second Stage Creche for Greatly Superior Children on time, being accepted without objection in spite of my pseudo-deformity.

It cannot be proved that any special emolument was offered to or accepted by the creche man-

agers in order to secure my acceptance. My personal belief is that nobody had to cough up.

Three years at Princeton passed relatively uneventfully for me. In spite of the best efforts and assurances of the creche psychologists, there was naturally a certain lack of initial acceptance of me by some of my creche mates. However, they soon became accustomed to my fore-and-aft bulges, and since I had greater endurance than they, with voluntary control over my artificial heart, I eventually gained acceptance, and even a considerable measure of leadership — insofar as leadership by an individual is possible in a creche.

Shortly after the beginning of my fourth year at the Princeton Creche, the second great personal disaster struck.

Somehow or other — the cause has not been determined to this day — my artificial heart went on the blink. I did not quite die immediately, but the prognosis was once again entirely unfavorable. Considerable damage had somehow eventuated to my lungs, my liver and my kidneys. I was a mess.

By this time, my parents had made such a huge investment in me, and my progress reports had been so uniformly excellent, that in spite of all the advice from the doctors, they determined to attempt salvage again.

**A** COMPLETE repackaging job was decided upon. Blood was to be received, aerated, purified and pumped back to the arterial system through a single mechanism which would weigh only about thirty-five pounds. Of course, this made portability an important factor. Remember that I was only ten years old. I could probably have carried such a weight around on my back, but I could never have engaged in the proper development of my whole body and thus could never have been accepted back again by Princeton.

It was therefore determined to put the machinery into a sort of cart, which I would tow around behind me. Wheels were quickly rejected as being entirely unsatisfactory. They would excessively inhibit jumping, climbing and many other boyish activities.

The manufacturers finally decided to provide the cart with a pair of legs. This necessitated additional machinery and added about twenty-five pounds to the weight of the finished product. They solved the problem of how I would handle the thing with great ingenuity by making the primary control involuntary. They provided a connection with my spinal cord so that the posterior pair of legs, unless I consciously ordered otherwise, always followed in the footsteps of the anterior pair. If I ran, they ran. If I jumped, they jumped.

In order to make the connection to my body, the manufacturers removed my coccyx and plugged in at and around the end of my spinal column. In other words, I had a very long and rather flexible tail, at the end of which was a smoothly streamlined flesh-colored box that followed me around on its own two legs.

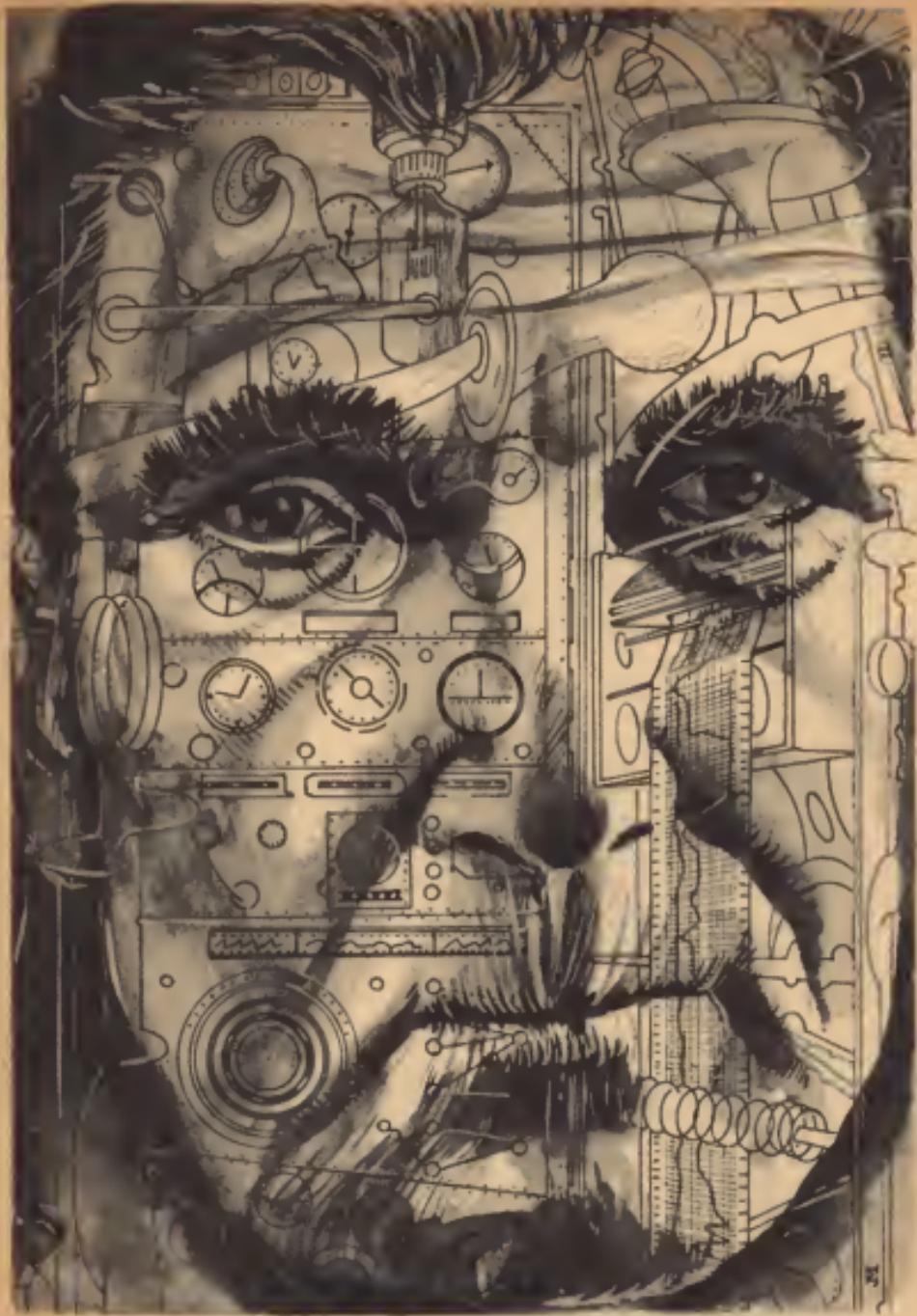
A human has certain normally atrophied muscles for control of his usually non-existent tail. Through surgery and training, those muscles became my voluntary controllers for my tail and the cart. That is, I could go around waggin' my tail while draggin' my wagon.

Pardon me, Miss Dix VI. That just slipped out.

**W**ELL, the thing actually worked. You should have seen me in a high hurdle race — me running along and jumping over the hurdles, with that contraption galloping along right behind me, clearing every hurdle I cleared. I kept enough slack in my tail so I wouldn't get pulled up short, and then just forgot about it.

Going off a diving board was a little bit different. I learned to do things like that with my back legs under voluntary control.

Speaking of diving boards, maybe you wonder how I could swim while towing a trailer. No trouble at all. I would just put my tail



between my legs and have my cart grab me around the waist with a kind of body scissors. The cart's flexible air sac was on its top when it was in normal position, so this held it away from my body, where it would not get squeezed. I would take in just enough air so that it was neutrally buoyant, and with its streamlined shape, it didn't slow me down enough to notice.

I usually "breathed" — or took in my air — through the intakes of the cart, and they stayed under water, but there was an air connection through my tail up to the lung cavity anyway, allowing me to talk. So I just breathed through my mouth in the old-fashioned way.

Backing up was rather a problem, with my posterior legs leading the way, and dancing was nearly impossible until I got the idea of having my trailer climb up out of the way onto my shoulders while I danced. That got me by Princeton's requirements, but I must confess that I was never very much in demand as a dancing partner.

At any rate, that system got me through to my sixth and last year at Princeton. I sometimes believe that I may be considered to be what is occasionally called an "accident-prone." I seem to have had more than my share of tough luck. During my last year at Princeton, I got my throat cut.

It was an accident, of course. No Princeton man would ever dream of doing away with someone he had taken a dislike to quite so crudely. Or messily.

**B**Y voluntary control of my heart, I slowed the action down to the point where I managed to keep from bleeding to death, but my larynx was destroyed beyond repair. That was when I got my Voder installation. It fitted neatly where my lungs used to be, and because it used the same resonant cavities, I soon learned to imitate my own voice well enough so that nobody could tell the difference, "before" or "after."

Actually, it was a minor accident, but I thought I'd mention it because of what the news media sometimes call my "inhuman voice." It even enables me to sing, something I never was much good at before that accident. Also, I could imitate a banjo and sing at the same time, a talent that made me popular at picnics.

That was the last real accident I had for quite a while. I got through my second (and last) home sabbatical, my Upper School, my First College and my Second College. I was chosen for, and got through, Advanced College with highest honors. Counting sabbaticals, that took a total of twenty-nine years, plus the last of my

time at Princeton. And then, an eager youth of forty-two, I was on my own — ready to make my way in the world.

I was smart to avoid the government service that catches so many of us so-called super-geniuses. It's very satisfying work and all that, I suppose, but there's no money in it, and I was rich enough to want to get richer.

The cart containing my organs didn't get in my way too much. With my athletic days behind me, I taught it to come to heel instead of striding along behind me. It was less efficient, but it was a lot less conspicuous. I had a second involuntary control system built in so it would stay at heel without conscious thought on my part, once I put it there.

In my office, I would have it curl up at my feet like a sleeping dog. People told me it was hardly noticeable — even people who didn't work for me. It certainly didn't bother me or hold me back. I started to make money as though I had my own printing press and managed to hang onto most of it.

**I**N spite of what the doom criers say, as long as there is an element of freedom in this country — and I think there always will be — there will be ways, and I mean legal ways, of coming into large hunks of cash. Within ten years, I was not only Big Rich; I

was one of the most important people in the world. A Policy Maker. A Power.

It was about that time that I drank the bottle of acid.

Nobody was trying to poison me. I wasn't trying to kill myself, either. Not even subconsciously. I was just thirsty. All I can say is I did a first rate job with what was left of my insides.

Well, they salvaged me again, and what I ended up with was a pair of carts, one trotting along beside each heel. The leash for the second one was plugged into me in front instead of in the back, naturally, but with my clothes on, nobody could tell, just by looking, that they were attached to me at all.

The doctors offered to get me by without the second trailer. They figured they could prepare pre-digested food and introduce it into my bloodstream through the mechanism of my original wagon. I refused to let them; I had gotten too used to eating.

So whatever I ate was ground up and pumped into my new trailer — or should it be "pre-ceder"? There it would be processed and the nutriments passed into my bloodstream as required. I couldn't overeat if I tried. It was all automatic, not even hooked into my nervous system. Unusable products were compressed and neatly packaged for

disposal at any convenient time. In cellophane. There was, of course, interconnection inside of me between the two carts.

I'm told I started quite a fad for walking dogs in pairs. It didn't affect me at all. I never got very good at voluntary control of my second trailer, but by that time my habit patterns were such that I hardly noticed it.

Oh, yes — about swimming. I still enjoyed swimming and I worked it out this way: Wagon number two replaced number one in straddling me, and wagon number one hung onto number two. It slowed me down, but it still let me swim. I quit diving. I couldn't spare the time to figure out how to manage it.

THAT took care of the next five years. I kept on getting richer. I was a happy man. Then came the crowning blow. What was left of me developed cancer.

It attacked my brain, among other things. And it was inoperable. It looked as if I had only a couple of years before deterioration of my mental powers set in, and then it would be the scrap heap for me.

But I didn't give up. By that time, I had gotten used to the parts-replacement program. And I was very rich. So I told them to get busy and build me an artificial brain as good as my own.

They didn't have time to make a neat package job this time. They took over three big buildings in the center of town and filled them with electronics. You should see the cable conduits connecting those buildings together! Then they bought the Broadway Power Plant and used most of its output. They ran in new water mains to provide the coolant.

They used most of my money, and it took all of my influence to speed things up, but they got the job done in time.

It won't do you any good to ask me how they transferred my memories and my personality to that mass of tubes and wires and tapes and transistors. I don't know. They tell me that it was the easiest part of the job, and I know that they did it perfectly. My brain power and my personality came through unchanged. I used them to get rich again in mighty short order. I had to, to pay my water and power bills.

I came out of it "Alfred the Magnificent" and still I'm just as human as you are, even if a lot of people — a few billions of them, I guess — won't believe it. Granted, there isn't much of the Original Me left, but there's an old saying that Glands Make the Man. Underneath it all, I'm the same Alfred Vanderform, the same old ordinary super-genius that I have always been.

I have almost finished with the background material, Miss Dix VI, and am nearly ready to present you my problem. I am now approaching the age of sixty — and have therefore reached the time of Selection for Fatherhood. I have, in fact, been fortunate enough to be one of the few selected to father three children.

**I**F you have chanced to hear rumors that money changed hands in getting me selected, let me tell you that they are entirely true. The only thing wrong about the rumors is that none of them has named a big enough amount — not nearly big enough. It isn't that I don't qualify by any honest evaluation. I do. But there has been a good deal of prejudice against me as a Father, and even some skepticism about my capability. But that doesn't matter; what does is that I *have* been selected.

What is more, a single superior

female was chosen to be Mother of all three of my children. By what is not at all a coincidence, this woman happens to be my private secretary. She is, I may add, very beautiful.

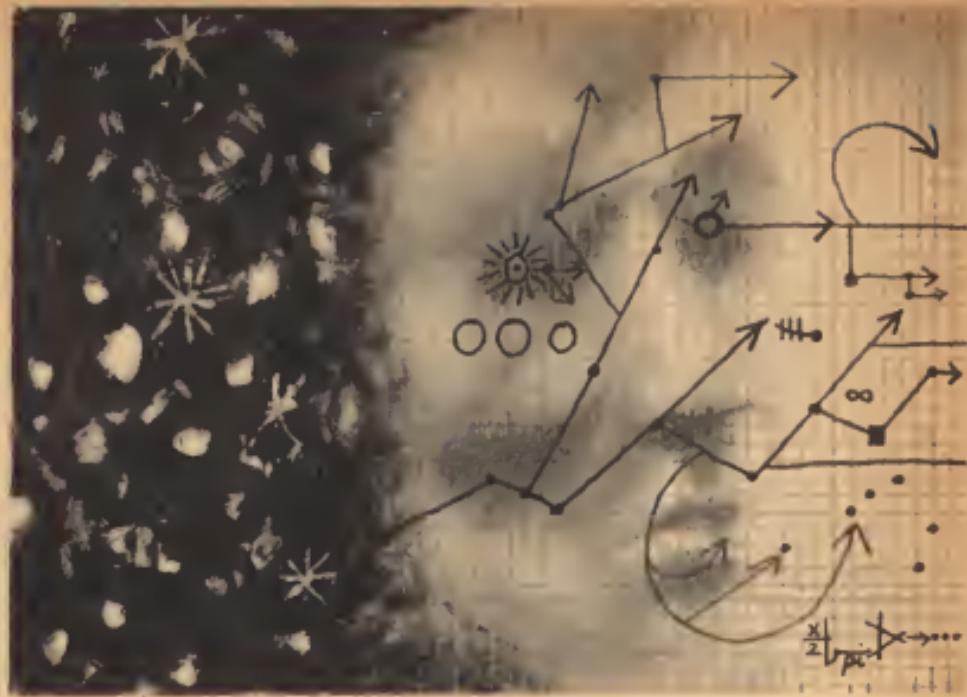
I am just old-fashioned enough to want my children to have all of the advantages that I had myself, including parents who are fully married, in the same way that my own mother nad father were. Legal ceremony—religious service —everything!

So I have asked the chosen mother of my children-to-be to marry me, and Gloria — that's her name — has been gracious enough to accept. We are to be married week after next.

Now, Miss Dix VI, we come to my problem. How can I tell if Gloria is in love with me, or is just marrying me for my money?

Perplexed,  
Alfred Vanderform  
(The Magnificent)  
— L. J. STECHER, JR.





## **Bullet With His Name**

By FRITZ LEIBER

Illustrated By: DILLON

THE Invisible Being shifted his anchorage a bit in Earth's gravitational field, which felt like a push rather than a pull to him, and said, "This featherless biped seems to satisfy Galaxy Center's requirements. I'd say he's a suitable recipient for the Gifts."

His Coadjutor, equally invisible and negatively massed, chewed that over. "Mature by his length and mass. Artificial plumage neither overly gaudy nor utterly drab — indicating median social level, which is confirmed by the size of his bachelor nest. Inward maps of his environment not fan-



**Before passing judgment, just ask yourself  
one question: Would you like answering for  
humanity any better than Ernie Meeker did?**

tastically inaccurate. Feelings reasonably meshed — at least neither volcanic nor frozen. Thoughts and values in reasonable order. Yes, I agree, a satisfactory test subject. Except . . . ”

“Except what?”

“Except we can never be sure of that ‘reasonable’ part.”

“Of course not! Thank your stars that’s beyond the reach of Galaxy Center’s keenest telepathy, or even ours on the spot. Otherwise you and I’d be out of a job.”

“And have to scheme up some other excuse for free-touring the Cosmos with backtracking permitted.”

"Exactly!" The Being and his Coadjutor understood each other very well and were the best of friends. "Well, how many Gifts would you suggest for the test?"

"How about two Little and one Big?" the Coadjutor ventured.

"Umm . . . statistically adequate but spiritually unsatisfying. Remember, the fate of his race hangs on his reactions to them. I'd be inclined to increase your suggestion by one each and add a Great."

"No—at least I question the last. After all, the Great Gifts aren't as important, really, as the Big Gifts. Besides . . . "

"Besides what? Come on, spit it out!" The Invisible Being was the bluff, blunt type.

"Well," said his less hearty but unswervingly honest companion, "I'm always afraid that you'll use the granting of a Great Gift as an excuse for some sardonic trick—that you'll put a sting in its tail."

"And why shouldn't I, if I want to? Snakes have stings in their tails (or do they on this planet?) and I'm a sort of snake. If he fails the test, he fails. And aren't both of us malicious, plaguing spirits, eager to knock holes in the inward armor of provincial entities? It's in the nature of our job. But we can argue about that in due course. What Little Gifts would you suggest?"

"That's something I want to

talk about. Many of the Little Gifts are already well within his race's reach, if not his. After all, they've already got atomic power."

"Which as you very well know scores them nothing one way or the other on a Galaxy Center test. We're agreed on the nature and the number of our Gifts — three Little, two Big, and one Great?"

"Yes," his Coadjutor responded resignedly.

"And we're agreed on our subject?"

"Yes to that too."

"All right, then, let's get started. This isn't the only solar system we have to visit on this circuit."

**E**RNIE Meeker — of Chicago, Illinois, U.S. of A., Occident, Terra, Sol, Starswarm 37, Rim Sector, Milky Way Galaxy — rubbed his chin and slanted across the street to a drugstore.

"Package of blades. Double edge. Five. Cheapest."

At one point during the transaction, the clerk lost sight of the tiny packet he'd placed on the coin-whitened glass between them. He gave a suspicious look, as if the customer had palmed them.

Ernie blinked. After a moment, he pointed toward the center of the counter.

"There they are," he said, dropping a coin beside them.

The clerk's face didn't get any less suspicious. Customer who

could sneak something without your seeing could sneak it back the same way. He rang up the sale and closed the register fast.

Ernie Meeker went home and shaved. Five days — and shaves — later, he pushed the first blade, uncomfortably dull now, through the tiny slot beside the bathroom mirror. He unwrapped the second blade from the packet.

Five shaves later, he cut himself under the chin with the second blade, although he was drawing it as gently through his soaped beard as if it were only his second shave with it, or at most his third. He looked at it sourly and checked the packet. Wouldn't have been the first time he'd absentmindedly changed blades ahead of schedule.

But there were still three blades in their waxed wrappings.

Maybe, he thought, he'd still had one of the blades from the last packet and shuffled it into this series.

Or maybe — although the manufacturers undoubtedly had inspectors to prevent it from happening — he'd got a decent blade for once.

Two or three shaves later, it still seemed as sharp as ever, or almost so.

"Funny thing," he remarked to Bill at lunch, "sometimes you get a blade that shaves a lot better. Looks exactly like the others, but shaves better. Or worse sometimes, of course."

"And sometimes," his office mate said, "you wear out a blade fast by not soaking your beard enough. For me, one shave with a stiff beard and the blade's through. On the other hand, if you're careful to soak your beard real good—four, five minutes at least—have the water steaming hot, get the soap really into it, one blade can last a long time."

"That's true, all right," Ernie agreed, trying to remember how well he had been soaking his beard lately. Shaving was a good topic for light conversation, warm and agreeable, like most bathroom and kitchen topics.

**B**UT next morning in the bathroom, looking at the reflection of his unremarkable face, there was something chilly in his feelings that he couldn't quite analyze. He flipped his razor open and suspiciously studied the bright metal wafer, then flipped it closed with an irritated shrug.

As he shaved, it occurred to him that a good detective-story murder method would be to substitute a very sharp razor blade for one the victim knew was extremely dull. He'd whip it across his throat, putting a lot of muscle into the stroke to get through the tangle, and — *urrrk!*

Ridiculous, of course. Wouldn't work except with a straight razor. Wouldn't even work with a straight

razor, unless . . . oh, well.

He told himself the blade was noticeably duller today.

Next morning, he was still using the freak blade, but with a persistent though very slight uneasiness. Things should behave as you expected them to, in accordance with their flimsy souls, he told himself at the barely conscious level. Men should die, hearts should break, girls should tell, nations perish, curtains get dirty, milk sour . . . and razor blades grow dull. It was the comfortable, expected, reassuring way.

He told himself the blade was duller still. Just a bit.

The third morning, face lathered, he flipped open the razor and lifted it out.

"You're through," he said to it silently. "I've had the experience before of getting bum shaves by trying to save a penny by pretending to myself that a wornout blade was still sharp enough, when it obviously couldn't be. Or maybe—" he grinned a little wryly—"maybe I'd almost get one more shave out of you and then you'd fall to pieces like the Wonderful One Horse Shay and leave me with a chin full of steel porcupine quills. No, thanks."

So Ernie Meeker pushed through the little slot beside the mirror and heard tinkle faintly down and away the first of the Little Gifts, the Everlasting Razor Blade. One

hundred and fifty thousand years later, it turned up, bright and shining, in the midst of a small knob of red iron oxide excavated by an archeological expedition of multi-brachs from Antares Gamma. Those wise history-mad beings handed it about wonderingly, from tentacle to impatient tentacle.

**T**HAT day, Ernie felt a little sick, somehow. After dinner, he decided it was the Thuringer sausage he'd eaten at lunch. He hurried up to the bathroom with a spoon, but as he clutched the box of bicarbonate of soda, preparatory to plunging the spoon into it, it seemed to him that the box said distinctly, in a small inward-outward voice:

"No, no, no!"

Ernie sat down suddenly on the toilet seat. The spoon rattled against the porcelain finish of the washbowl as he laid it down. He held the box firmly in both hands and studied it.

Size, shape, materials, blue color, closure, etc., were exactly as they should be. But the white lettering on the blue background read:

#### AQUEOUS FUEL CATALYST

Dissociates H<sub>2</sub>O into hemi-quasi-stable H and O, furnishing a serviceable fuel-and-oxydizer mix for most motorcycles, automobiles, trucks, motorboats, airplanes, stationary motors, torque-

twisters, translators, and rockets (exhaust velocity up to 6000 meters per second). Operates safely within and outside of all normal atmospheres. No special adaptor needed on oxygenizer-atmosphere motors.

*Directions:* Place one pinch in fuel tank, fill with water. Add water as needed.

A-F Catalyst should generally be renewed when objective tests show fuel quality has deteriorated 50 per cent.

*U.S. and Foreign Patents Pending*

After reading that several times, with suitable mind-checking and eye-testing in between, Ernie took up a little of the white powder on the end of a nailfile. He had thought of tasting it, but had instantly abandoned the notion and even refrained from sniffing the stuff — after all, the human body is mostly water.

After reducing the quantity several times, he gingerly dumped at most four or five grains on the flat edge of the washbowl and then used the broad end of the nailfile to maneuver a large bead of water over to the almost invisible white deposit. He closed the box, put it and the nailfile carefully on the window ledge, lit a match and touched it to the drop, at the last moment ducking his head a little below the level of the washbowl.

Nothing happened. After a moment, he slowly withdrew the

match, shaking it out, and looked. There was nothing to see. He reached out to touch the stupid squashed ovoid of water.

Ouch! He withdrew his fingers much faster than the match, shook them more sharply. Something was there, all right. Heat. Heat enough to hurt.

HE cautiously explored the boundaries of the heat. It became noticeable about eighteen inches above the drop and almost an inch to each side — an invisible slim vertical cylinder. Crouching close, eyes level with the top of the washbowl, he could make out the flame—a thin finger of crinkled light.

He noticed that a corner of the drop was seething — but only a corner, as if the heat were sharply bounded in that direction and perhaps as if the catalyst were only transforming the water to fuel a bit at a time.

He reached up and tugged off the light. Now he could see the flame — ghostly, about four inches high, hardly thicker than a string, and colored not blue but pale green. A spectral green needle. He blew at it softly. It shimmied gracefully, but not, he thought, as much as the flame of a match or candle. It had character.

He switched on the light. The drop was more than half gone now; the part that was left was all seeth-

ing. And the bathroom was markedly warmer.

"Ernie! Are you going to be much longer?"

The knock hadn't been loud and his widowed sister's voice was more apologetic than peremptory, but he jumped, of course.

"I am testing something," he started to say and changed it midway. It came out, "I am be out in a minute."

He turned off the light again. The flame was a little shorter now and it shrank as he watched, about a quarter inch a second. As soon as it died, he switched on the light. The drop was gone.

He scrubbed off the spot with a dry washrag, on second thought put a dab of vaseline on the washrag, scrubbed the spot again with that — he didn't like to think of even a grain of the powder getting in the drains or touching any water. He folded the washrag, tucked it in his pocket, put the blue box—after a final check of the lettering—in his other coat pocket, and opened the door.

"I was taking some bicarb," he told his sister. "Thuringer sausage at lunch."

She nodded absently.

**S**LEEP refused even to flirt with Ernie, his mind was full of so many things, especially calculations involving the distance between his car and the house and

the length of the garden hose. In desperation, as the white hours accumulated and his thoughts began to squirm, he grabbed up the detective story he'd bought at the corner newsstand. He had read thirty pages before he realized that he was turning them as rapidly as he could focus just once on each facing page.

He jumped out of bed. My God, he thought, at that rate he'd finish the book under three minutes and here it wasn't even two o'clock yet!

He selected the thickest book on the shelf, an overpoweringly dull historical treatise in small print. He turned two pages, three, then closed it with a clap and looked at the wall with frightened eyes. Ernie Meeker had discovered, inside the birthday box that was himself, the first of the Big Gifts.

The trouble was that in that wee-hour, lonely bedroom, it didn't seem like a gift at all. How would he ever keep himself in books, he wondered, if he read them so fast? And think how full to bursting his mind would get — right now, the seven pages of fine-print history were churning in it, vividly clear, along with the first chapters of the new detective story. If he kept on absorbing information that fast, he'd have to be revising all his opinions and beliefs every couple of days at least — maybe every couple of hours.

It seemed a dreadful, literally

maddening prospect — his mind would ultimately become a universe of squirming macaroni. Even the wallpaper he was staring at, which imitated the grain of wood, had in an instant become so fully part of his consciousness that he felt he could turn his back on it right now and draw a picture of it correct to the tiniest detail. But who would ever want to do such a thing, or want to be able to?

It was an abnormal, dangerous, temporary sensitivity, he told himself, generated by the excitement of the crazy discovery he'd made in the bathroom. Like the thoughts of a drowning man, riffling an infinity-paneled adventure-comic of his life as he bolts his last rough ration of air. Or like the feeling a psychotic must have that he's on the verge of visualizing the whole universe, having its ultimate secrets patter down into the palm of his outstretched hand — just before the walls close in.

Ernie Meeker was not a drinking man, then. A pint had stood a week on his closet shelf and only been diminished three shots. But now he did a good job on the sturdy remainder.

Pretty soon the unbearable, edge-of-doom clarity in his mind faded, the universe-macaroni cooked down to a thick white soup uniform as fog, and the words of the detective story were sliding into his mind individually, or at

most in strings of three and four. Which, if it wasn't as it ideally should be in an ambitious man's mind, was at least darn comfortable.

He had not rejected the Big Gift of Page-at-a-Glance Reading. Not quite. But he had dislocated for tonight at least the imposed nervous field on which it depended.

**F**OR want of a better place, Ernie dropped the rubber tube from the bathtub spray into the scrub bucket half full of odorous pink fluid and stared doubtfully at the uncapped gas tank. The tank had been almost empty when he'd last driven his car, he knew, because he'd been waiting until payday to gas up. Now he had used the tube to siphon out what he could of the remainder (he still could taste the stuff!) and he'd emptied the fuel line and carburetor, more or less.

Further than that, in the way of engine hygiene, Ernie's strictly kitchen mechanics did not go, but he felt that a catalyst used in pinches shouldn't be too particular about contaminants. Besides, the directions on the box hadn't said anything about cleaning the fuel tank, had they?

He hesitated. At his feet, the garden hose gurgled noisily over the curb into the gutter; it had vindicated his midnight estimate, proving just long enough. He

looked uneasily up and down the dawning street and was relieved to find it still empty. He wished fervently, not for the first time this Saturday morning, that he had a garage. Then he sighed, squared his shoulders a little, and lifted the box out of his pocket.

Making to check the directions the umpteenth time, he received a body blow. The white lettering on the box had disappeared. The box didn't proclaim itself sodium bicarbonate again — there was just no lettering at all, only blue background. He turned it over several times.

Right there died his tentative plan of eventually sharing his secret with some friend who knew more than himself about motors (he hadn't decided anyway who that would be). It would be just too silly to approach anyone he knew with a more-than-wild story and featureless blue box.

For a moment, he came very close to dropping the box between the wide-set bars of the street drain and pouring the pink gas back in the tank. It had hit him, in a way for the first time, just how crazy this all was, how jarringly implausible even on such hypotheses as practical jokes, secret product perhaps military, or mad inventor (except himself).

For how the devil should the stuff get into his bathroom disguised as bicarb? That circum-

stance seemed beyond imagination. Green flames . . . vanishing letters . . . "torque-twisters, translators" . . . a box that talked . . .

**A**T that point, simple faith came to Ernie's rescue: in the same bathroom, he *had* seen the green flame; it had burned his fingers.

Quickly he dipped up a little of the white powder on the edge of a fifty-cent piece, dumped it in the gas tank without quibbling as to quantity, rapped the coin on the edge of the opening, closed and pocketed the blue box, and picked up the spurting hose and jabbed it into the round hole.

His heart was pounding and his breath was coming fast. That had taken real effort. So he was slow in hearing the footsteps behind him.

His neighbor's gate was open and Mr. Jones stood open-mouthed a few feet behind him, all ready for his day's work as streetcar motorman and wearing the dark blue uniform that always made him look for a moment unpleasantly like a policeman.

Ernie swung the hose around, flipping his thumb over the end to make a spray, and nonchalantly began to water the little rectangle of lawn between sidewalk and curb.

The first things he watered were the bottoms of Mr. Jones's pants legs.

Mr. Jones voiced no complaint.

He backed off several steps, stared intently at Ernie, rather palely, it seemed to the latter. Then he turned and made off for the street-car tracks at a very fast shuffle, shaking his feet a little now and then and glancing back several times over his shoulder without slowing down.

Ernie felt light-headed. He decided there was enough water in the gas tank, capped it, and momentarily continued to water the lawn.

"Ernie! Come on in and have breakfast!"

He heeded his sister's call, telling himself it would be a good idea "to give the stuff time to mix" before testing the engine.

He had divined her question and was ready with an answer.

"I've just found out that we're supposed to water our lawns only before seven in the morning or after seven in the evenings. It's the law."

IT was the day for their monthly drive out to Wheaton to visit Uncle Fabius. On the whole, Ernie was glad his sister was in the car when he turned the key in the starter — it forced him to be calm and collected, though he didn't feel exactly right about exposing her to the danger of being blown up without first explaining to her the risk. But the motor started right up and began purring pow-

erfully. Ernie's sister commented on it favorably.

Then she went on to ask, "Did you remember to buy gas yesterday?"

"No," he said without thinking; then, realizing his mistake, quickly added, "I'll buy some in Wheaton. There's enough to get us there."

"You didn't think so yesterday," she objected. "You said the tank was nearly empty."

"I was wrong. Look, the gauge shows it's half full."

"But then how . . . Ernie, didn't you once tell me the gauge doesn't work?"

"Did I?"

"Yes. Look, there's a station. Why don't you buy gas now?"

"No, I'll wait for Wheaton — I know a place there I can get it cheaper," he insisted, rather lamely, he feared.

His sister looked at him steadily. He settled his head between his shoulders and concentrated on driving. His feeling of excitement was spoiled, but a few minutes of silence brought it back. He thought of the blur of green flashes inside the purring motor. If the passing drivers only knew!

Uncle Fabius, retired perhaps a few years too early and opinionated, was a trial, but he did know something about the automobile industry. Ernie chose a moment when his sister was out of the room

to ask if he'd ever heard of a white powder that would turn water into gasoline or some usable fuel.

"Who's been getting at you?" Uncle Fabius demanded sharply, to Ernie's surprise and embarrassment. "That's one of the oldest swindles. They always tell this story about how this man had a white powder or something and demonstrated it once with a pail of water and then disappeared. You're supposed to believe that Detroit or the big oil companies got rid of him. It's just another of those malicious legends, concocted—by Russia, I imagine—to weaken your faith in American Industry, like the everlasting battery or the razor blade that never gets dull. You're looking pale, Ernie—don't tell me you've already put money in this white powder? I suppose someone's approached you with a proposition, though?"

WITH considerable difficulty, Ernie convinced his uncle that he had "just heard the story from a friend."

"In that case," Uncle Fabius opined, "you can be sure some fuel-powder swindler has been getting at *him*. When you see him—and be sure to make that soon—tell him from me that—" and Uncle Fabius began an impassioned ninety-minute defense of big business, small business, prosperity, America, money, know-how, and a num-

ber of other institutions that defended pretty easily, so that the situation was wholly normal when Ernie's sister returned.

As soon as the car pulled away from the curb on their way back to Chicago, she reminded him about the gas.

"Oh, I've already done that," he assured her. "Made a special trip so I wouldn't forget. It was while you were out of the room. Didn't you hear me?"

"No," she said, "I didn't," and she looked at him steadily, as she had that morning. He similarly retreated to driving.

Stopping for a railroad crossing, he braked too hard and the car stalled. His sister grabbed his arm. "I knew that was going to happen," she said. "I knew that for some reason you lied to me when—" The motor, starting readily again, cut short her remark and Ernie didn't press his small triumph by asking her what she was about to say.

To tell the truth, Ernie wasn't feeling as elated about today's fifty-mile drive as he'd imagined he would. Now he thought he could put his finger on the reason: It was the completely . . . well, *arbitrary* way in which the white powder had come into his possession.

If he'd concocted it himself, or been given it by a shady promoter, or even seen the box fall out of the pocket of a suspicious-looking man

in a trenchcoat, then he'd have felt more able to do something about it, whether in the general line of starting a fuel-powder company or of going to the F.B.I.

But just having the stuff drop into his hands from the sky, so to speak, as if in a crazy dream, and for that same reason not feeling able to talk about it and assure himself he wasn't going crazy . . . oh, it is rough when you can't share things, really rough; not being able to share depressing news corrodes the spirit, but not being able to share exciting news can sometimes be even more corroding.

Maybe, he told himself, he could figure out someone to tell. But who? And how? His mind shied away from the problem, rather decisively.

WHEN he checked the blue box that night, the original sodium bicarbonate lettering had returned with all its humdrum paragraphs. Not one word about exhaust velocities.

From that moment, the fuel-powder became a trial to Ernie rather than a secret glory. He'd wake in the middle of the night doubting that he had ever really read the mind-dizzying lettering, ever really tested the stuff — perhaps he'd bring from sleep the chilling notion that in the dimness and excitement of Saturday

morning he'd put the water in some other car's gas tank, perhaps Mr. Jones's. He could usually argue such ideas away, but they kept coming back. And yet he did no more bathroom testing.

Of course the car still ran. He even fueled it once again with the garden hose, sniffing the nozzle to make sure it hadn't somehow got connected to the basement furnace oil-tank. He picked three o'clock in the morning for the act, but nevertheless as he was returning indoors he heard a window in Mr. Jones's house slam loudly. It unsettled him. Coming home the next day, he caught his sister and Mr. Jones consulting about something on the latter's doorsteps, which unsettled him further.

He couldn't decide on a safe place to keep the box and took to carrying it around with him day and night. Bill spotted it once down at the office and by an unhappy coincidence needed some bicarb just then for a troubled stomach. Ernie explained on the spur of the moment that he was using the box to carry plaster of Paris, which involved him in further lies that he felt were quite unconvincing as well as making him appear decidedly eccentric, even butter-brained. Bill took to calling him "the sculptor."

Meanwhile, besides the problem of the white powder, Ernie was having other unsettling experiences,

stemming (though of course he didn't know that) from the other Gifts — and not just the Big Gift of Page-at-a-Glance Reading, though that still returned from time to time to shock his consciousness and send him hurrying for a few quick shots.

LIKE many another car-owning commuter, Ernie found the traffic and parking problems a bit too much for comfort and so used the fast electric train to carry him five times a week to the heart of the city. During those brief, swift, crowded trips Ernie, generally looking steadily out the window at the brown buildings and black stanchions whipping past, enjoyed a kind of anonymity and privacy more refreshing to his spirit than he realized. But now all that had been suddenly changed. People had started to talk to him; total strangers struck up conversations almost every morning and afternoon.

Ernie couldn't figure out the reason and wasn't at all sure he liked it — except for Vivian.

She was the sort of girl Ernie dreamed about, improperly. Tall, blonde and knowing, excitedly curved but armored in a black suit, friendly and funny but given to making almost cruelly deflating remarks, as if the neatly furled short umbrella dangling from her wrist might better be a black dog whip.

She worked in an office too, a fancier one than Ernie's, as he found out from their morning conversations. He hadn't got to the point of asking her to lunch, but he was prodding himself.

Why such a girl should ever have asked him for a match in the first place and then put up with his clumsy babblings on subsequent mornings was a mystery to him. He finally asked her about it in what he hoped was a joking way, though she seemed to know a lot more about joking than he did.

"Don't you know?" she countered. "I mean what makes you attractive to people?"

"Me attractive? No."

"Well, I'll tell you then, Ernie, and I've got to admit it's something quite out of the ordinary. I've never noticed it in anyone else. Ernie, I'm sure your knowledge of romantic novels is shamefully deficient, it's clear from your manners, but in the earlier ones—not in style now — the hero is described as tall, manly, broad-shouldered, Anglo-Saxon features, etcetera, etcetera, but there's one thing he always has, something that sounds like poetic over-enthusiasm if you stop to analyze it, a physical impossibility, but that I have to admit you, Ernie, actually have. Flashing eyes."

"Flashing eyes? Me?"

She nodded solemnly. He



thought her long straight lips trembled on the verge of a grin, but he couldn't be sure.

"How do you mean, *flashing eyes*?" he protested. "How can eyes flash, except by reflecting light? In that case, I guess they'd seem to 'flash' more if a person opened them wide but kept blinking them a lot. Is that what I do?"

"No, Ernie, though you're doing it now," she told him, shaking her head. "No, Ernie, your eyes just give a tiny flash of their own about every five seconds, like a lighthouse, but barely, *barely* bright enough for another person to notice. It makes you irresistible. Of course I've never seen you in the dark; maybe they wouldn't flash in the dark."

"You're joking."

Vivian frowned a little at that remark, as if she were puzzled herself.

"Well, maybe I am and maybe I'm not," she said. "In any case, don't get conceited about your *Flashing Eyes*, because I'm sure you'll never know how to take advantage of them."

When he parted from her downtown, pausing a moment to watch her walk away with feline majesty, he muttered "*Flashing Eyes!*" with a shrug of the shoulders and a skeptical growl. Just the same, he ducked his head as he moved off and he pulled the brim of his hat down sharply.

**A**FTERNOONS, hurtling home in the five o'clock rush, it was not Vivian but Verna who frequently occupied the seat beside him, taking up rather more space in it than the *Panther Princess*. Verna was another of his newly acquired and not altogether welcome conversation-pals, along with Jacob the barber, Mr. Willis the druggist and Herman the health-food manufacturer, inventor of *Soybean Mush* — conquests of his *Flashing Eyes* or whatever it was.

Verna was stocky, pasty-faced, voluble (with him), coy, and had bad breath — he could see the tiny triangles of pale food between her incisors and canines whenever her conversations became particularly vehement and confidential, which was often. She always had a stack of books hugged to her stomach. She worked in a fur-storage vault, she said, and could snatch quite a bit of time for reading — rather heavy reading, it seemed.

It wasn't very long before Verna was head-over-heels (fearful picture!) infatuated with him. Somehow his friendliness had touched a hidden spring in this ugly, friendless, clumsy girl and for once she had lost her fear of the world's ridicule and opened her hulking heart to another human being. It was touching but rather overpowering, especially since she always opened her mouth too. He learned a great deal about

herself, her invalid father, Elizabethan and Restoration poetry, paleontology, an organization known as the Working Girls' Front, Mr. Abrusian, and a brassy Miss Minkin who sounded like a fiendish caricature of Vivian.

He felt that deliberately avoiding Verna would be a dirtier trick than he liked to think himself capable of. Nevertheless there were times when he seriously wished he'd never acquired whatever power it was — except for Vivian, of course. What the devil, he asked himself for the *n*th time, could that power be?

That night, in the bathroom, the question came back to him and he impulsively switched off the light and looked into the mirror. He gasped and seemed on the point of shrieking out something, but he only grasped the washbowl more tightly and stared into the mirror more intently.

After about a minute, he tugged on the light again. He was pale. He had convinced himself of the actual existence of the phenomenon that was in reality the third of the Little Gifts: Flashing Eyes.

He couldn't notice anything in the light, but in the dark his eyes gave off a faint blue flash about every five seconds, just as Vivian had said, lighting up his cheeks and eyebrows like some comic-book vampire!

It might be attractive by day,

when it just registered as an impalpable hint, but it was damn sinister in the dark! It wasn't much, but it was *there* — unless the flashes were inside his head and he was projecting them . . . blue . . . something called the Purkinje effect? . . . but then Vivian had actually seen . . . oh, damn!

**S**UDDENLY he wildly looked around, a little like a trapped animal. Why did it always have to happen in the *bathroom*, he asked himself — the bicarb, the flame, the blade (if that counted), and now this? Could there be something wrong about the bathroom, something either in the room itself or in his childhood associations?

But neither the bathroom walls nor his minutely searched memory returned an answer.

It was dark in the hall outside and he almost bumped into his sister. He recoiled, stared at her a moment, then threw his hand over his eyes, darted into his bedroom and shut the door.

"Is there something wrong, Ernie?" she called after him.

"Wrong?"

The door muffled his voice. "How do you mean?"

"I mean about your eyes."

"My eyes?" It was almost a scream. "What about my eyes?"

"Don't shout, Ernie. I mean are they painful?"

"Painful? Why should they be painful?"

"I really don't know, Ernie." She was being very patient and calm.

"I mean did you notice anything about them?" He was trying to be the same without much success.

"Just that you put your hand up to them as if they hurt."

"Oh." Great relief. "Yes, they do smart a little. I guess I've been using them too much. I'm putting some eye-drops in them now."

"Can I help you, Ernie? And shouldn't you see an opto . . . ocu . . . optha . . . I mean an eye doctor?"

Ernie answered "No" to both those questions, but of course it took a lot more lying and improvising and general smoothing out before his sister would even pretend to be satisfied and stop her general nagging for the evening. She was getting uncomfortably cagy and curious lately, addicted to asking such questions out of a blue sky as:

"Ernie, when we were visiting Uncle Fabius, did you actually believe that you went out and bought gas?"

That one momentarily brought Ernie's stammer back, something which hadn't troubled him for years.

And when she wasn't asking questions, her quiet studying of

him for long minutes was even more upsetting.

NEXT morning, on the way to the electric train, Ernie made a purchase at the drugstore. When he sat down beside Vivian, she took one look at him and gave a very deliberate-sounding hollow laugh.

"Black glasses!" she said. "I tell him he's attractive because he has Flashing Eyes and within two days he's wearing black glasses. I suppose I should have guessed it."

"But my eyes hurt," Ernie protested. "Sensitive to sunlight, I think." He wished he could explain to her that he'd bought the glasses not only in case he got caught out at night, but also to convince his sister he hadn't been lying about sore eyes. He hadn't intended to wear them by day and hardly knew why he'd put them on before joining Vivian.

"Spare me your rationalizations," she said. "Your motives are clear to me, Ernie, and they happen to be very commonplace."

She leaned toward him and her voice, little more than a whisper, took on an unexpectedly gloomy, chilling, hopeless tone.

"See these people all around us, Ernie? They're suicides, every one of them. Day by day, in every way, they're killing themselves. People love them, admire them, and it only makes them uneasy.

They have abilities and charms by the bushel — yes, they do, even that man with the wen on his neck — and they only try to hide them. The spotlight turns their way and they goof. They think they're running away from failure, but actually they're running away from success."

Ernie looked at them, he couldn't help it, her voice made him, and the ability of Page-at-a-Glance Reading chose that moment to come back to him, only applied to faces instead of letters, and there seemed to be another ability along with it, unclear as yet but frightening. He felt like a very old detective scanning the lineup for the thousandth time.

The black glasses didn't interfere a bit — the dozens of faces in this speeding electric car were suddenly as familiar as the court cards in a deck — and he had the feeling that, like a bunch of pink pasteboards, they were about to be hurled in his face.

My God, he asked himself, flinching, how could you go on living with so many faces so close to you, so completely known? — each street you turned into, each store you entered, each gathering you joined, another deluge of unique features. Ugly, pretty, strong, weak — those words didn't mean anything any more in this drenching of individuality he was getting, and that showed no signs of stopping.

So he hardly heard Vivian saying, "And it's true of you, Ernie — in spades, for your black glasses," and he hardly remembered parting from her, and when he found himself alone he did something unprecedented for him at that time of day — he went to a bar and drank two double whiskies.

THE drinks brought the downtown landscape back to normal and stopped the faces printing themselves on his mind, but they left him very disturbed, and the suspiciousness with which he was treated at the office didn't improve that, and Ernie began to wish for ordinariness and commonplaceness in himself more than anything in the whole world. If only, he silently implored, there were some way of junking everything that had happened to him in the past few weeks — except maybe Vivian.

Verna on the train home positively terrified him. She was unusually talkative and engulfing this evening and he thought that if the faces-forever feeling came to him just as she was baring her food-triangles and all, he wouldn't be able to stand it. Somehow, it didn't. Yet the very intensity of his distaste frightened him. Not for the first time, the word "insanity" appeared in his mind, pulsing in pale yellowish-green.

Half a block from home, passing his parked car (with an uncon-

scious little veer of avoidance), he spotted three figures in close conference in front of his house: his sister, a man in dark blue—yes, Mr. Jones, and . . . a man in a white coat.

Almost before he knew it, he was in his car and driving away. He truly didn't know what he was going to do, only that he was going to do it, and found a trivial interest in trying to guess what it was going to be. Whatever it was, it was going to dim that yellowish-green word, decrease its type-size, make him a little more able to face the crisis waiting him at home . . . or somewhere.

He had a picture of himself getting on an airplane, another of renting a room in a slum, another of stopping the car on a lonely, treeless country road and getting out and looking up to the coldly glimmering Milky Way—why?

That last picture was the most vivid, and when he realized he had actually stopped his car, it was a moment before it would go away. Then he saw he was parked in front of a demolished old apartment building a few blocks from his home. Only yesterday he'd watched the last wall going down. Now, just across the littered sidewalk from him, the old cellar gaped, flimsily guarded in front by a makeshift rail and surrounded on the other three sides by great hillocks of battered bricks. To-

morrow probably (and in fact that was the way it happened) a bulldozer would tumble them forward, filling the cellar with old bricks and brick-dust, leveling the lot.

**N**OW he knew what he was going to do. He unlatched the top over the windshield and pushed the button. Slowly the top folded back over his head, showing the smoke-dark sky, almost night. He hitched up a little in the seat, reached inside his coat, pulled out the blue box he always carried and pitched it into the dark pit across the sidewalk.

He was driving away almost before it landed. Yet through the hum of the motor he thought he heard something call faintly, "Good-by."

The material of the filled-in cellar stayed fairly dry for many years and the atom-bombing, when it finally came, created a partial surface-seal of fused stone over that area. However, the bicarb box fell apart in time; water reached it in little seepings and was accumulated as a non-evaporating fuel-and-oxydizer mix. The amount of this strange fluid grew and grew, eventually invading and filling a now-blind section of the city's old sewer system.

Many tens of thousands of years after that, the buried pool was sensed by the fuel-finders of a spaceship from up Polaris way,

which had made an emergency landing on the ruined planet. A well was drilled and the mix pumped up and the centipedal Polarians, scuttling about the bleak landscape, had a fine time trying to explain how such a sophisticated fluid should occur in a seeming state of nature. However, they were grateful to the Cosmic All-Father.

Long before that, Ernie had arrived home in something of a daze. He told himself that he had cast off the most tangible element of his "insanity," but he didn't feel any the better for it. In fact, he felt distinctly apathetic when his sister confronted him and only with an effort did he manage to brace himself for the trial he knew she had in store for him.

"Ernie," she said hesitatingly, "I've come to a decision about something—about a change in our arrangements here, to tell you the truth—and I've gone ahead with it without consulting you. I do hope you won't mind."

"No," he said heavily, "I guess I won't mind."

"I'm doing it partly on Mr. Jones's advice," she added slowly. "As a matter of fact he suggested it."

Ernie nodded. "Yes, I've noticed the two of you conferring together."

"You have? Then maybe you know what I'm talking about"

"Oh, yes." Ernie nodded again and smiled grimly. "The man in white?"

She laughed. "Exactly, the man in white. For a long time, I've thought it was just too much bother for either of us to carry the milk home, and the eggs and my yogurt too. So I decided to have the milkman that Mr. Jones uses make deliveries. Mr. Jones brought him over half an hour ago and it's all arranged. Four quarts a week, one dozen eggs, and yogurt Tuesdays and Fridays."

THE Invisible Being and his Coadjutor, backtracking for a checkup, summarized the situation.

The latter said, "So he's already thrown away the Everlasting Cosmetic Knife and the Water Splitter; he seems to be trying to reject the third Little Gift and the first Big One, while he still isn't even conscious of the other two Gifts."

"Cheer up," said the Invisible Being. "It's his life and he's doing what he thinks best."

"Yes," the Coadjutor said, "but he doesn't know he's making these decisions for his race as well as himself. Sometimes I think Galaxy Center makes it too hard for chaps like him. For instance, that trick of having the images on the box fade back to the old ones."

"Nonsense! We have to take all

reasonable precautions that our activities remain secret. He knew that the powder worked. He should have had faith."

"Sometimes it takes a lot of faith."

"You're right, it does." The Invisible Being smiled his Cheshire smile. "You feel a lot for these test subjects, don't you? That's fine, but you've got to remember you can't accept the Gifts for them; that's one thing they have to do themselves, however long they take about it. Which reminds me, I think we ought to set up a recorder here to report the final outcome of the test to Galaxy Center."

"Good idea."

"And cheer up, I say. This test isn't over yet and our featherless biped isn't necessarily licked. If he thinks to link up the third Little Gift with the two Big Ones, he has a pretty sweet setup for making psychic progress—and his race will be Galactic Citizens in a jiffy."

"You're right."

"Moreover, it stands to reason he's soon going to become aware of the Great Gift, and that generally gives a person a jolt and makes him think seriously about other things."

"True enough — though I still have the feeling you intend some sardonic trick in conjunction with the Great Gift. Are you sure you're not planning to leave some other

setup here along with the recorder? I notice you've got a spare Juxtaposer in the ship and it bothers me."

"That, dear Coadjutor, is my business. Whatever I do, it won't interfere in any way with the fairness of the tests."

"Sometimes I think the tests are too fair," the Coadjutor observed. "I'd like to be able to ease them up a bit in special cases."

"Confidentially, my friend, so would I."

THE Great Gift announced itself to Ernie next morning at 7:53 sharp, when the Special slowed to forty miles an hour to swing past the platform on which he was waiting for the Express.

One moment he was standing morning-weary on the thick wooden planks, looking down through the quarter-inch gaps between them at the cinders five feet below, vaguely conscious of a woman's white-polka-dotted black skirt on one side of his field of vision and a man's brown shoes and briefcase to the other.

Next moment he was in a small cab under which steel rails were vanishing at an alarming speed, and way ahead he could just make out the platform on which he was standing, and something was hurting his head and he was slumping forward and everything was dark-

ening and the cab was leaping forward more swiftly still.

The third moment he was back on the platform, running furiously to get off it. He didn't care who yelled at him or whom he bumped, so long as it didn't slow him down. The people were just blurs anyway and soon he was beyond them. He took in two strides the short flight of wooden steps leading down off the platform proper and spurted the last sixty feet to the stairs leading down to street level. There he stumbled, recovered himself, and chanced a hasty backward look.

There was a tall man at his heels, hugging a briefcase and panting hard. Then, beyond the tall man, he saw the platform rear up like a wooden caterpillar, spilling people against the bright gray morning sky. There was a cosmic crunch and the battered Special, still coming strong, burst through the upreared platform in a blossoming broken-matchstick crown of planks and beams — and big blue sparks where a writhing power wire, snagged by the uprearing platform, was grounding against the first car.

Ernie ducked his head and plunged down the steps ahead.

(That was how I came to meet Ernie Meeker. I was the tall man. As you can imagine, it's quite strange to be standing in a huddle of fresh-washed morning com-

muters and have the one beside you close his eyes and slump a little and then take off like a bat out of hell—without a word spoken or a thing happened to explain it. I started to laugh, but then I got the funniest feeling of curiosity and terror and I took off after him. It saved my life.

(Afterward, Ernie and I went back to help with the ghastliness, but pretty soon there were more than enough trainmen, firemen, police, and what not, and we got chased off. We had a couple of drinks together and met a few times after and that's how I got some of this story. But my chief sources of information I am not permitted to disclose.)

**A**S the Invisible Being had predicted, Ernie's first brush with the Great Gift gave him a considerable jolt, though he didn't suspect at first that it was a permanent gift.

He analyzed what had happened, quite reasonably, I believe, as a case of second sight. Somehow his mind had been projected into the brain of the motorman of the Special just at the moment the latter had his stroke (the final official explanation too) and blindly put on more speed instead of reducing it for the approaching curve and station. His second sight saved his life by getting him off the platform before the Special

jumped the tracks and ploughed through it.

It certainly gave a jolt to Ernie's habit patterns, as it temporarily did of a great many other people. He started driving his car to work, for one thing, and he took to drinking regularly in the evenings, though not excessively as yet.

He also had the feeling, which he did not try to analyze, that his miraculous escape marked the end of the "strange weeks" in his life, when he'd had such odd illusions or been the victim of such odd circumstances; and, true enough, that first week or so there were no recurrences of his chillingly weird experiences.

## **B**UT jolts have their infallible Law of Diminishing Effects.

After a few days, Ernie found the traffic and parking problems as nervous and wearisome as ever and he grew envious of the snug commuters meditating luxuriously in their electric coaches. Come the first morning of the third week and he was standing on the rebuilt platform, studying the new planks, ties and rails with a pleasantly morbid interest.

Vivian was not in her accustomed seat nor on the train, as far as he could tell, which did not surprise him, though it disappointed him sharply; the Panther Princess had a stronger hold on his feelings, or at least on his



imagination, than he'd realized.

But Verna was on the train home all right; in fact, she gave a small whoop of pleasure when she spotted him. And he had barely sat down beside her when who should come prowling smoothly along but Vivian in a charcoal version of her tailored black armor.

Ernie jumped up and blurted



out introductions. Vivian accepted his seat with a certain deliberateness and with a smile that seemed to Ernie to say, "So I'm his morning light-bardinage girl, but this is the girl Mr. Meeker goes home with. It's another instance of 'black-glasses' behavior, don't you think? He puts her on whenever he gets afraid he's getting attractive."

THE two women started to chat easily enough, however, and shortly Ernie got over his confusion and, smiling down at them from where he swayed in his aisle with his hand lightly touching the back of the seat ahead, was even thinking quite smugly that here in one seat, by gosh, were the woman he wanted and the woman who wanted him. Very interesting

to be the man in the middle.

Just at that moment, the power came back to him that made everything feverishly real, expanding his center of attention to his visual horizons, and this time it was only a prelude, for a second gateway opened behind the first — a window into all human hearts and minds, the power of human insight fantastically sharpened and enlarged. He could "read minds," or at least he knew the motives—the core of values and consciousness—of any person he cared to look at. Most especially, he knew the motives of Verna and Vivian almost as if he were them.

The big thing about Vivian was her fear—no, her conviction, that she wasn't attractive. Every glance her way knocked a hole in the armor of artificial attractiveness she built around herself, and all the hours she devoted to perfecting it, even the desperate worship she lavished on her body, were all utterly lost. A simple relationship with another human being was unthinkable; her armor got in the way and under her armor she knew she was worthless. A man was sometimes attracted to her armor — never to herself! — but as soon as he started to scrutinize it, it began to tarnish and crumple.

She hoped that other people, men especially, had a trace of her own weaknesses, and she sniped away at them constantly to get

under the armor to find out. Ernie was one in a long series of such men. She was actually in love with him, but only as one loves a dream, not the really Ernie at all. Physically he was disgusting to her, like most men.

**V**ERNA, on the other hand, had absolute confidence that she was sufficiently attractive for all practical purposes. She wasn't in love with Ernie at all. She wanted to make an intellectual conquest of him, add him to her private Brain Trust, her cultured entourage that won Mr. Abrusian's seldom-tendered admiration and broke Miss Minkin's heart, and finally get Ernie to join the Working Boys' Front. He was one of her projects. If it became tactically necessary during her campaign, she knew that Ernie would be only too happy to jump in bed with her, food-triangles and all.

Now in other circumstances (who really knows?), Ernie might have found the courage to accept Vivian and Verna as they really were and work on from there, ruthlessly discarding his false pictures of them — and of himself. He might conceivably have found the strength to accept all people not as shadowy projections of himself, fabricated targets of his desires and aversions, puppets in his private chess games and circuses, but as complete persons with in-

exhaustible surprises and contradictions, each a microcosm, a universe-in-little with his or her own earth and stars, spaceflight and crawling, heaven and hell.

But under the present circumstances, Ernie was confused. His knowledge of the real Vivian spoiled completely the titillating picture of the Panther Princess, who might submit to him contemptuously in the end — he needed that sex idol more than he needed truth. As for Verna, her stalwart self-reliance and her accurate appraisal of his own motives and possible future behavior were both unbearably humiliating to him. And the delight of really knowing people was completely outweighed, in his tired spirit, by the thought of the lifetime of work that would be involved in adjusting himself to this new knowledge. It was so much more comfortable to work with stereotypes.

The Express was slowing for his station. Both girls were looking at him puzzledly.

"Good-by, Verna. Good-by, Vivian," he said in a set sort of voice. "This is where I get off."

He moved stiffly toward the door. They watched him go, and turned to each other with a frown.

**T**HAT evening marked the beginning of Ernie's serious drinking. He never saw either of the V-girls again. He took his car or the

bus to work; then, for a short period, he took taxicabs, then he lost his job and was working in another part of the city. He became mixed up with a number of other women and crowds, but they are not part of this or any story.

Among other things, his drinking eventually completely confused his memories of abnormal personal powers with his entirely normal illusions of alcoholic ones. And it also seemed to be blotting out the former. Once, at a party, he bet twenty dollars that his eyes glowed in the dark. Next morning he was relieved to discover, after making several anxious phone calls, that he'd lost his bet.

When he finally pulled out of it, some five years later, because of a growing aversion to liquor that he only understood later, the two Big Gifts of Page-at-a-Glance and Mind Reading were gone forever.

The Great Gift had a more durable lodgment in him. From his alcoholic years, he brought hazy memories of accidents avoided because of sudden wrong-ended visions of onrushing cars, alley rollings missed because he'd seen himself reeling along a block away through the eyes of lounging hoodlums. Now, sober again, he had a clear confirmation of it when he left a banquet on a trumped-up excuse because of a disturbing vision of inexplicable rodlike

shapes — and read the next day that a hundred of the guests, of whom four finally died, had come down with bacterial food poisoning. Another time, hiking in dry woods, he'd smelled smoke that his companions couldn't — and persuaded them to turn back, avoiding a disastrous flash fire that broke out soon afterward.

He had to admit to himself that he certainly seemed to have the gift of second sight, warning him against threats to his life.

"All right," he told himself, "so forget it. Gifts are upsetting. Even as a kid, you sweated more about your birthday presents than you ever got fun out of them."

Our story has already jumped five years; now it must jump twenty. Ernie is living with his sister again; while he was drinking, they pulled apart, and now they've once more pulled together. They're having dinner, have arrived at dessert, a big piece of chocolate cake each with satiny thick creamy frosting and filling.

Ernie looks at his piece—and sees himself climbing stairs and clutching at his heart. He thinks of warning his sister, but she's already halfway through her piece. Then she goes on and eats Ernie's.

**E**RNIE'S sister didn't get food poisoning, she only got fat, but the incident of the chocolate cake was for Ernie the beginning

of a series of peculiar food revolutions and diet experiments that eventually made Ernie instead of his sister the family yogurt-fied and a regular customer of his old acquaintance, Herman, the health-food manufacturer.

Herman had to admit that Ernie had cooked himself up a pretty good longevity diet for an amateur, though there were some items in it that made the old man shake his head — and he always asserted that Ernie was passing up a good thing in Soybean Mush.

Ernie got his diet tailored to fit his tastes and stuck to it. He had a strong suspicion of what had happened, though he tried not to think about it too often: that his gift of second sight had taken to warning him of the longer-range dangers to his existence; after all, chocolate cake can be as deadly as atomic bombs in the long run.

More years passed. Friends and relatives began to remark quietly to each other that his sister was aging faster. Ernie, they had to admit, was a remarkably well-preserved old gent. Ironic, considering what a drunk he'd been and what strange junk he insisted on eating now.

One day Ernie's self-styled health diet began to pall on him. It didn't revolt him; it merely left him unsatisfied, yet with no yearning for any particular food he could think of. He lived with this

yearning for some weeks, meditating on it and trying to guess its nature. Finally he had an inspiration. He headed for Mr. Willis' drugstore.

The bent, silvery-haired man greeted him eagerly; somehow there was a special warmth about the friendships Ernie had made during the "strange weeks" (Verna and Vivian excepted) that put them in a different class from any other of his human relationships.

"Now what can I give you, Ernie?" Mr. Willis asked. "Anything in the place within reason."

"I'll tell you, Bert. I'd like to go back in your dispensary — you with me, if you want — and just shop around."

"That's a sort of screwy idea, Ernie. I couldn't sell you any narcotics or sleeping pills, of course — well, maybe a few sleeping pills."

"I wouldn't want any."

"What's the idea, Ernie? Getting interested in chemistry in your old . . . You know, Ernie, you just don't look your years."

"Secret of mine. Yes, in a way I've got interested in chemistry."

"Won't talk, eh? I remember, when I first met you, I tagged you for an evening inventor. Well, come on back and shop around. Just don't ask me for *elixir vitae, aurum potabile*, or ground philosophers' stone."

"Not unless I see 'em."

Afterward, Bert Willis used to say it was one of the most mystifying experiences of his life. For a good half a day, Ernie Meeker studied the rows of jars, cannisters and glass-stoppered bottles, sometimes lifting two down together and contemplating them, one in each hand, as if he could weigh the difference. Often he'd take out a stopper and sniff, and maybe, asking permission of Bert with a glance, take up a dab of some powder and taste it.

"You know that game," Bert would say, "where someone goes out of the room and you all decide on an object, or hide one, and he comes back and tries to find it by telepathy or muscle-reading or something? That was exactly the way Ernie was acting. Dog on a difficult scent."

A couple of times, especially when the customers came in, Bert wanted to chase him out, except that Ernie was such a special friend and Bert was so darn curious about it all himself.

In the end, Ernie made a good twenty purchases, including a mortar and pestle and two poisons for which Bert made him sign, though the amounts were less than a lethal dose.

"Actually none of the chemicals he bought were very dangerous," Bert would say. "And none of them were terribly unusual. The

thing about them was that, put together, they just didn't make sense—as a medicine or anything else. Let me see, there was sulphur, bismuth, a bit of mercury, one of the sulfa drugs, a tiny packet of auric chloride, and . . . I had 'em all on a list once, but I've lost it."

After that, Ernie always mixed a little grayish paste in his cup of yogurt at suppertime.

Ernie stopped aging altogether.

After his sister's coffin was lowered past the margins of green matting into the ground, Ernie shook hands with the minister, walked Bert Willis and Herman Schover to their car and told them he thought he'd better drive home with some relatives who'd turned up. Actually he just wanted to stay behind a while. It was a beautiful blue-and-white summer day; the tidy suburban cemetery had caught his fancy, and now he felt like a quiet stroll.

Ernie followed his little impulses these days. As he sometimes said, "I figure I've got plenty of time. I just don't feel the pressure like I used to."

The last car chugged away. Ernie stretched and started to stroll, slowly, but not like an old man, now that he was alone. His hair had grown whiter in the last few years and his face a little wrinkled, but that was due to the very judicious use of silvering and theatri-

cal liner — people's comments about his youthfulness had gotten wearisome and would, he knew, eventually become suspicious.

Keeping himself oriented by a white tower at the cemetery gate, he arrived at an area that had no graves as yet, no trees either, just lawn. He made his way to the center of it, where there was a gently swelling hummock, and sat down in the warm crinkly grass, resting his back against the slope. The sky was lovely, enough clouds to be interesting, but a great oval of pure blue just overhead—a pear-shaped gateway to space.

He felt no grief at his sister's death, only the desire to think a bit, have a quiet look at his past and another at the great future.

Alone like this, he dared to face his fate for a moment and admit to himself that, all wishful thinking aside, it really began to look as if he were going to live forever, or at least for a very long time.

Live forever! That was a phrase to give you a chill, he told himself. And what to do, he asked himself, with all that time?

Back in the "strange weeks," he'd have had little trouble in answering that question — if only he'd known then what he did now and realized what was being offered him. For, during his sober decades, Ernie had gradually come to a shrewdly accurate estimate of what had happened to him then.

He thought of it in terms of having been offered six Gifts and turned down five of them.

**B**ACK in the "strange weeks" and armed with the five rejected Gifts (Page-at-a-Glance and Mind Reading were the only ones that counted, though), he could easily have said, "Live forever by all means! Increase your knowledge and understanding until your mind bursts or is transfigured. Plunge forever into the unending variety of the Cosmos. Open yourself to everything."

But now, equipped to travel only as a snail . . .

Still, even snails get somewhere. With forever to work with, even four-words-at-a-glance gets you through many, many books. Patient love and dispassionate thought give you human insight in the end, can finally open the tightest shutter on the darkest human heart.

But that would take so very long and Ernie felt tired. Not old, just tired, tired. Best simply to watch the soft clouds — the pear-shaped gateway had become almost circular. To do anything but drift through life, a stereotype among stereotypes, was simply . . . too . . . much . . . work . . .

At that very moment, as if his thought had summoned the experience into being, another scene filmed over the blue sky and

white clouds above him. The sudden humming in his ears — a kind of "audible silence" — informed him that his second sight was at work, warning him of some deadly danger. But this was a more gentle instance of it, for not all his consciousness jumped somewhere else. All through the experience, he was still aware of himself leaning against the grassy hummock, of the restful melancholy of the scene around him, and of the sky overhead. The second scene only superimposed itself on the first.

He was poised many hundreds of miles above the Earth, a ghost-Ernie immune to the airlessness and the Sun's untempered beams. At his back was black night filled with stars. Below him stretched the granulated dry brown of Earth's surface, tinged here and there with green, clumped with white cloud, and everywhere faintly hazed with blue.

**U**P there in space with him, right at his elbow, so close that he could reach out and touch it, was a tiny silver cylinder about as big as a hazelnut, domed at one end, reflecting sunlight from one point in a way that would have been blinding enough except that Ernie's ghost eyes were immune to brightness.

As he reached out to examine it, the thing darted away from him as if at some imperious summons,

like a bit of iron jumping through a magnetic field.

But in spite of its enormous acceleration, Ernie's ghost was able to follow it in its downward plunge. It kept just ahead of his outstretched fingertips.

The brown granules that were Earth's surface grew in size. The tiny metal cylinder began to glow with more than reflected sunlight. It turned red, orange, yellow and then blazing white as atmospheric friction transformed it into a meteor.

Ernie's ghost, immune to friction and incandescence alike, followed it as it dove toward its target — for even though Ernie had never heard of a Juxtaposer and how it brought objects together, he had the feeling, from the dizzy speed of the meteor's plunge, that it yearned for something.

He knew most meteors vaporized or exploded, but this did not, even when Earth's brown surface grew rivers and roads. Suddenly there was a cloudbank ahead; then, in the white, there appeared an almost circular hole toward the very center of which the meteorite plunged.

Everything was happening very fast now, but his ghost senses were able to keep pace. As they plunged through the cloud-ring and the green landscape below grew explosively, he saw the white tower, the trees, the curving drives, and

the clearing which was now the target.

There was still time to escape. Lying on the warm grass, with death lancing down from the sky at miles a second, he had merely to roll over.

But it was simply . . . too . . . much . . . work . . .

**E**LSEWHERE near Earth, a recorder sped toward Galaxy Center a message which ended, "Six Gifts tendered, all finally refused. I will now sign off and await pickup with one Juxtaposer."

A little later, a Receiver in Galaxy Center passed the message to a Central Recorder, which filed it in the Starswarm 37 section with this addition: "Spiritual immaturity of Terran bipeds indicated. Advise against enlightenment and admission to Galactic citizenship. Test subject humanely released."

**POLICE**, digging into the turf under Ernie's shattered head two days later found the bright bullet, cold now, of course, and untarnished.

"Looks like silver!" one cop said, scratching his head. "Haven't I heard somewhere that the Mafia use silver bullets? So bright, though."

Lieutenant Padilla, later on, lifting the bullet in his forceps to re-examine it for rifling marks, had the same thought about its bright-

ness. By now, however, he knew it was not silver. (What alloy was never satisfactorily determined. Actually it was made of the same substance as the Everlasting Razor Blade.)

This time, although he still found no rifling marks, a tiny dull stretch on the flat end of the cylinder caught his attention. He took up a magnifier and examined it carefully.

A moment later, he put down the magnifier, snatched up the pocketbook found on the dead man

and rechecked some cards in it. The bullet dropped from the forceps, rolled a few inches. The lieutenant sat back in his chair, breathing a little hard.

"This is one for the books, all right!" he told himself. "I've heard a lot of people, soldiers especially, talk about such bullets, but I never expected to see one!"

For under the magnifying glass, finely engraved in very tiny letters, he had read the words: ERNEST WENCESLAUS MEEKER.

— FRITZ LEIBER

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## GALAXY'S 5 Star Shelf

*THOSE IDIOTS FROM EARTH* by Richard Wilson. *Ballantine Books, N. Y.* \$2.00

**B**ALLANTINE follows up Wilson's successful *Girls from Planet Five* with this collection of ten assorted short stories. The yarns are of varying length and likewise of varying quality.

The title story, evidently written for the collection in the whacky mood of *Girls*, is the account of the attempted invasion of Earth by super-computers. Only the most cockeyed Multivac conceivable sits between them and conquest.

"The Hoaxters" and "The Inhabited" you've seen in this magazine. "Lonely Road" is a mood piece of exceptional impact. The remaining tales taper off, but not too far, from these quite lofty high points.

*THE LIVING PAST* by Ivar Lissner. *G. P. Putnam's Sons, N.Y.* \$5.95

**M**OST readers are skimmers and most books are skimmable. Crafty Lissner, realizing this literary fact of life, has therefore studded almost every page

with attention rivets. It is easy to see why it was received with rave reviews by the European press and why German, Italian, French and Dutch editions have been best sellers.

The range is enormous: each region of the world worthy of note gets its due. Lissner amazes in his ability to telescope living, human detail into limited space, and he is at his best in dealing with the most enigmatic of ancient civilizations: Crete, Mohenjo-Daro, Etruria, Tiahuanacu.

This is a truly remarkable job that does just what the title claims to do.

**AND THERE WAS LIGHT** by Rudolph Thiel. Alfred A. Knopf, N. Y., \$6.95

THIEL'S book, subtitled "The Discovery of the Universe," is a beautifully organized work. It takes up where last month's *Theories of the Universe* by Munitz left off. But, where that work concerned itself solely with Cosmology on the grand scale, Thiel brings many of the individuals who formulated the grandiose theories into human focus.

The reader is led through the developmental stages of astronomy — the orientation tool and seasonal clock of antiquity, the dark age of astrology and the present age of reality. Skillfully written and trans-

lated, and with excellent reproductions of old engravings and modern illustrations, it is digestible for layman and professional alike.

**THEY'D RATHER BE RIGHT** by Mark Clifton and Frank Riley. Gnome Press, N. Y., \$3.00

THE four years since magazine publication of this novel haven't resolved my doubts about the credibility of the authors' concept.

The hero and "heroine" are a young but incredibly mature telepath and a super-servomechanism, nicknamed Bossy, with the extraordinary capability of reteaching and rebuilding humans whose thought processes haven't frozen into false patterns.

Joe Carter, the telepath, and Professors Hoskins and Billings, who built Bossy via unsuspected control by Carter, have had to go underground to avoid being seized by the oppressive opinion-control government. While in hiding, they reconstruct Bossy who, in turn, knocks out a gorgeous telepathic helpmeet for Joe from an old Skid Row slattern.

Although a passably workman-like job, loose ends outnumber neat knits in this yarn.

**THE IMMENSE JOURNEY** by Loren Eisely. Random House, N.Y., \$3.50

**EISELY**, Anthropology Dept. head at the U. of Penn., is that rare bird, the thoroughgoing technician blessed with superior imagination. Accordingly, his non-fiction journey into time is a wonderful blend of erudition and whimsy. For example, the opening chapter describes his descent into an eroded slit and his confrontation with an ancient mammalian skull. "The creature had never lived to see a man, and I, what was it I was never going to see?"

"I have long been an admirer of the octopus but I have always felt it to be just as well for us that they never came ashore, but — there are things down there that are still coming ashore."

"The profound shock of the leap from animal to human status is echoing still in the depths of our subconscious."

These quotes barely illustrate the delight of this admixture of scientific lore and pure fantasy. An anthropological gotta, unreservedly recommended.

**MAN: HIS FIRST MILLION YEARS** by Ashley Montagu. *World Publishing Co., Cleveland, \$3.75*

**O**F all the sciences, anthropology ultimately is the basic. Who and what are we? Why and how are we? Answer these questions and the divine puzzle falls into

place. Unfortunately, the odds are stacked against our solving these problems. Additionally, there is violent disagreement among anthropologists.

Montagu holds that a jump of 400 cc cranial capacity is "inconceivable." Therefore, the australopithecines, apelike men of South Africa, are very low in the chain of humanity. Loren Eiseley believes that Ice Age chronology requires drastic revision and that the "Million Years" are in truth closer to three hundred thousand but, more important, that cranial capacity suddenly expanded, that modern man is a very recent product.

Montagu's ever-recurrent theme is that "human beings can learn to do the things that men have anywhere done." In his study of past and present cultures, he finds universal similarities and believes that mankind is moving toward unity without uniformity.

**SOLOMON'S STONE** by L. Sprague de Camp. *Avalon Books, N.Y. \$2.75*

**F**OR many years, I have been a de Camp follower. While not quite making me an official deserter from his ranks, the above opus does succeed in removing some of the gilt from an idol.

The hero, a colorless CPA, is stranded on the astral plane during an experiment in sorcery by an

unwittingly summoned demon. The astral level is crammed with idealized versions of his work-a-day friends. He himself is a French cavalier in a world of knights, emperors, western heroes and a horde of Aryan Wotans.

He outwits them all, of course, with his CPA background, in a few humorous encounters. But de Camp has done better in the past with less.

**REASON AND CHANCE IN SCIENTIFIC DISCOVERY** by R. Taton. *Philosophical Library, N.Y.*, \$10.00

A RECENT release by Philosophical was John Rowland's study of the limitations of the scientific method. The present work, though obviously not designed for the purpose, has restored my faith in said method.

Part One lists Mathematics, the Theoretical Sciences and Observational and Experimental Sciences as realms of discovery. Part Two contrasts systematic discovery, chance, error and flashes of thought as factors. Part Three covers various aspects of discoveries.

The book is well documented with personal notations by famed

scientists that give a considerable insight into the creative workings of the mind of genius.

**STAR GIRL** by Henry Winterfeld. *Harcourt, Brace, N.Y.*, \$2.75

FOR a juvenile, this is a most uncommon book. A visitor from space, a pretty young girl, has fallen into a Bavarian forest from her father's flying saucer. Unable to land, he cautions her to return to the clearing in the woods the following night. She is found by a group of youngsters and their efforts to protect her make the story. They must adopt frantic measures to keep her from the hands of the adults who don't believe her origin and want to put her away.

All this is not unusual, but Winterfeld's depiction of both young and adult thoughtlessness and cruelty certainly is. Also, his ET is 87 years old and wears a necklace of huge diamond beads. She is not a case of arrested development, though the town constable would like to make it so.

Exciting enough and different enough to satisfy jaded juvenile tastes.

— FLOYD C. GALE



# BLANK FORM

By ARTHUR SELLINGS

*They knew there was an answer somewhere . . . now all they had to do was find the question*

Illustrated by MARTINEZ

THE car came, finally, to a shuddering halt, slewed violently across the road.

Fletcher gave himself a moment to recover. He had never run a man down before. But it needed no prior experience to know that if it happened at seventy-five — and if the man stepped straight in front of your headlights — what was left of the victim was beyond urgency.

He backed the car to the side of the road and got out on trembling legs. He peered back along the highway. The moon was up, but the scrawling skid marks were still as black where they stemmed

from the shadows of night a hundred yards away.

The sight snapped into focus the reality of what had just happened. Fletcher broke into a run, retracing the black lines, the darkness stumbling back before him.

He stopped abruptly.

The lines came to an end, luridly wide and black, where he had slammed on the brakes. And—there was nothing else. No body, no trace of anything he had told himself to be prepared to find. No blood or tattered flesh, no mangled shoe horribly alone.

He wondered if his car had carried the body along in front of

it. He turned to go back before he realized that in that case he would surely have seen some trace on the road between.

The thought came that he hadn't actually *felt* the impact. You probably didn't at that speed, he told himself, and peered into the tree-lined darkness of the roadside. The collision must have hurled the man clear.

His eye caught a stir in the scrub then. Something moved into a patch of moonlight before it slithered behind the trunk of a big tree.

For a frantic moment, Fletcher tried to tell himself that he had been mistaken; the victim had somehow survived, dragged himself clear—and that was what he had seen. But the explanation withered. He had seen it too clearly—a snake, a big one. Python-size. Snakes that huge weren't native for several thousands of miles around.

His defensive reaction was to forget it and resume his search for the victim's body. If a python had escaped from a local zoo, it wasn't his affair—certainly not right now.

But a stronger impulse guided his feet toward the tree. He was a psychiatrist. Either he had seen a snake or he was having traumatic delusions. He had to know which. He skirted the tree warily.

"Good evening." A man stepped out from the tree's shadow.

FLETCHER jumped. "Who are you?" he blurted inanely.

"My name's Lewis," the stranger said. "I live in Sanderville, three miles on."

"What are you doing here?" Fletcher's voice was shaky. He had killed a man—and hadn't found a trace of him yet. He had seen a big snake in country where there weren't such things. And now, silently and unconcernedly, as if from his own front door, stepped this stranger.

"Just an evening walk." The man half-smiled. "A habit of mine." He frowned, as slightly as he had smiled. "Why?"

"Didn't you hear anything? I ran someone down in my car a minute ago."

The man shrugged. "The main line's just beyond the woods. A freight train just went through."

True enough, Fletcher could hear the noise of a train rumbling into the distance. "But didn't you see a—"

He stopped, suddenly alerted to the danger of appearing crazy. But this one could be nailed. He leaped behind the tree. Behind it was a clear tract of turf. No room to conceal anything, let alone a snake of the size he had seen . . . or thought he had seen. And the stranger obviously hadn't seen it, or he would surely have mentioned it. Then Fletcher *must* have imagined it.

Strangely, the certainty didn't disturb him. Nobody needed to remind him the mind could do odd things as a result of shock. And he still had to find the body of his victim. He turned back to the stranger, who was looking at him curiously.

"Help me, will you?" Fletcher asked. He went back to the highway. The stranger accompanied him willingly enough. They beat the roadside for yards around the scene of the accident, but without success.

They straightened simultaneously.

"Are you sure there was an accident?" the stranger said.

Fletcher looked at him coldly. "You can see the skid marks."

The man nodded. "But that doesn't prove there was a victim. You can get things wrong. An unlit road, moonlight, tree shadows."

"Maybe," Fletcher growled. But the startled image that had sprung up in the road had been no accidental pattern of moonlight and shade. That was one certainty, even if he couldn't find the body. "Anyway, I'm reporting the accident at Sanderville, I—"

He broke off as something registered. The stranger had said he lived at Sanderville, three miles on. Not back or up the road.

On. That meant the stranger knew which way Fletcher had been

traveling. Or did it? Was his disturbed brain putting unnecessary stress on an innocent enough phrase? Fletcher didn't care.

**H**E looked directly into the stranger's eyes. "I'll want you to come along as witness." The next moment, he cursed himself. He should have merely offered a lift.

The man looked indignant. "But I wasn't a witness. I told you I—"

"All the same—" Fletcher took a grip on the other's arm—"if you don't mind—"

The man squirmed in his grasp, which tightened warily. The stranger was not tall, but seemed wiry. Fletcher was bigger, though, and—he felt—stronger. But suddenly there wasn't a man in his grasp any more. The arm seemed to waver—then, for a moment so brief that Fletcher couldn't be sure that it actually happened, melt into formlessness.

Instantly there was another creature—a stag, already poised for flight.

Reason promptly abdicated. It was something much more primitive, fear, that hurled Fletcher onto the stag, grappling blindly with it.

The shape became man again and lashed out at Fletcher. He half-turned his head. The blow hit his ear. It hurt, but didn't stun. His own right plunged into the other's solar plexus. The man's

eyes popped foolishly as his breath stopped. Fletcher didn't give him a chance to change into any other shape. He slammed a cross to the jaw.

Panting, Fletcher looked down at the senseless body. Somewhere an owl hooted, and Fletcher was aware of the craziness of what he was doing—standing over an unconscious man, on guard against him changing his shape!

But he—it—didn't. Whatever strange power this man had evidently didn't work when he was unconscious.

What power was it? Hypnosis? Fletcher didn't know. He *did* know now that his own senses hadn't been playing him tricks. At least, not without outside influence. He bent down and slung the man over his shoulder.

Getting back to the car, he bundled the body into the trunk and locked it. On his way to the driving seat, he took a belated look at the front of the car. There wasn't a mark on it. He pursed his lips thoughtfully, then climbed in and drove off.

And he drove straight through Sanderville. There was no reason to believe that the police were competent to deal with creatures that seemed able to change their shape at will.

There was no reason to believe he was, either—but he intended to try.

THE stranger groaned and stirred on the couch. Fletcher, seated rather more distantly from him than if he had been a patient, craned forward.

Eyes blinked open, stared blankly up at the lamp angled above, then moved to Fletcher.

"You're safe here," Fletcher said quickly but softly. In a firmer tone, he added, "The door's locked and the windows are shuttered."

The alarm in the stranger's eyes died to a smoldering resignation. He sat up, rubbing his jaw. "Where is this?" he asked finally. "The police?"

"No, it's my office. I'm a psychiatrist. You gave me an almighty fright tonight, walking under my car the way you did—apart from what happened afterward. I brought you here to hear your explanation."

"You worked that one out then?"

"Does it take much working out? I run a man down, can't find the body, do see a snake, then don't see it, but find a man. When the man changes into a stag and back again, there's something going on. Something so irrational that it's not irrational to figure that the man was also the snake. That he changed shape to escape sudden death the way an ordinary man might duck. Right?"

The man nodded dumbly. Fletcher waited for him to say

something. When he didn't, he added levelly: "The question is—what kind of man are you?"

The man was sitting with shoulders bowed, his gaze downcast. Now he raised melancholy eyes to look straight into Fletcher's. "I don't know."

Fletcher, returning his gaze, felt a twinge of sympathy—and a conviction that the other was speaking the truth. "Do you mind if I try to help?"

The man smiled bitterly. "I don't think anyone could. But you've got me backed into a corner."

"Hell, I don't want you in a corner. It may take time and I can't keep you locked up here. You've got to be convinced of my good will, otherwise that power of yours might panic."

"It might. Especially if it got suspicious of your motives. If, for instance, you tried to publicize my case."

Fletcher laughed. "Would anyone believe it?"

The other laughed, too, briefly, as if despite himself. "I guess not." He was suddenly dead serious. "If you knew what it was like to be . . . the way I am, you—"

"We're all odd in some respect," Fletcher murmured, then, seeing the look in the other's face, "I'm sorry. Stock response. You can trust me."

"All right. I haven't been able

to find the answer myself. But it's your risk."

"I'll take that chance." Fletcher poised his pen. "Full name?"

"John Lewis." The man smiled wryly. "Or Bill Smith or Fred Jones. I chose John Lewis."

"I see. Will all the rest be made up, too?"

L EWIS shrugged. "There isn't much to make up. They don't ask many questions, the circles I've been moving in. On forms, I say I'm twenty-eight, born in Alaska—that's far enough away to put people off checking."

"Amnesia, then. But for the rest of this, let me have it straight. Just when and where did you find yourself without a name and a past?"

"Up in Oregon. There was a big project going on up there, a new town being built. One of the men found me in the woods."

"What kind of shape were you in? Damn, I mean—"

Lewis gave a flicker of a smile. "That's all right. To answer the question I don't believe you meant, I was this shape. And I was in fair condition. But I was pretty helpless. I couldn't even speak English."

Fletcher's eyebrows rose. "When did that come back?"

"It — didn't come back."

"You mean you learned it all over again?"

"That's right. Only I don't think it was again."

"How long ago was this?"

"Not quite three years ago."

"Hm-mm." Fletcher made a note, a single word, *Intelligent*. For the other had perfect command of the language now. "What happened then? How did you get by?"

"It wasn't hard. All they wanted up there was a strong arm and a broad back. And there was an acute labor shortage. After a couple of years, I'd stacked up a good roll, so I came down here to find out about myself if I could."

"You think you came from these parts, then?"

"Nothing so easy. It was just that there weren't so many books up there. I had to read to find out the answer, if there was one. I read books on psychiatry, medicine, folklore, myth, the occult, heaven knows what else." He looked up at Fletcher, as the latter made two lines under the word *Intelligent*. "But I drew a blank."

"Then your other — ah — talent had already shown itself by then." The other looked at him warily, so he added, "If yours had been an ordinary amnesia case, you would already have gone to see somebody like me, wouldn't you?"

Lewis relaxed, suspicion yielding to a respect for Fletcher's understanding. "Yes, this talent, as you call it — it first happened when I'd been on the job about six

months. The iron-fighters botched setting a girder. They'd got one end bolted, and the other end came free. It's quite a sight to see a solid-steel flange bend like cardboard. The girder came swinging down, crashed through a platform and headed for me.

"The next thing I clearly remember was finding myself in the woods nearby, trembling. I seemed to have fallen down, my head was so near the ground. But I was still standing on my feet—all four of them. They were yellow, and I had a tail. I felt it thrashing as I looked out from cover at the confusion of the accident. I had changed into a mountain lion. Just like that. I realized I was safe — and I suddenly changed back. I returned to the job.

"Nobody had noticed. There had been too much going on. Three men had been injured. Someone did start to say that it was funny but he could have sworn he'd seen—then he stopped and shook his head.

"There was only one other time. I was swimming in a lake up there. I went out further than I should and got into difficulties. I changed into a fish."

FLETCHER finished his notation. "These changes have happened in an emergency, just like this evening. But have you ever tried to change?"



"It doesn't work," Lewis said. "It seems to work only like a reflex."

"As I thought." Fletcher pondered. "You said you've read folklore, myth, the occult. There are accounts there, of course, of men changing into other creatures."

"I know. But not the way I change. Anyway, I don't feel bewitched, if that doesn't sound like a stupid thing to say."

"No. Besides, if it were witchcraft, I wouldn't be qualified to help at all. So let's examine other possibilities. You've lived with this for three years. Do you have any theory at all?"

Lewis framed his lips to speak, stopped, framed his lips again. Fletcher waited.

Lewis seemed finally to make up his mind. "I think I came from another world."

He looked at Fletcher almost defiantly, but Fletcher said only, "Yes?"

"Yes. I believe that I crashed, that I lost not only my memory but my shape. Heaven knows what I was originally, but I must have been of some species that could change its shape at need, which would be an asset on the different worlds it visited. Does that make sense?"

"More sense than anything I can think up on the spur of the moment. Whatever the truth, the only way to discover it is to get

beyond the traumatic block that is sealing off your previous existence." He looked deliberately at Lewis. "That might be dangerous."

"How?"

"Because a traumatic block is set up in the mind in self-defense. Penetrate it—there's no knowing how the mind may react. And, in your case, another danger occurs to me. If your makeup is non-human, the treatment itself might have a totally unexpected effect on you."

Lewis considered that. "I'm game, if you are. But I think you face two dangers, too. First, my peculiar talent might not take kindly to my being treated and might run amok. It hasn't been entirely fear for my own safety that's stopped me visiting a psychiatrist before. What treatment do you have in mind?"

"Narco-analysis. I put you under narcosis and, by asking you questions, try to dig your past out of your subconscious. I'll just have to keep my fingers crossed that your talent will keep quiet. But what's the other danger?"

"Well, if I did come from another world, I must have been on some kind of mission. What if the mission . . . was a hostile one?"

**G**LANCING up suddenly at him, Fletcher smiled. "There you sit, decent enough to be concerned about my welfare, and

you're trying to convince me that you might be a monster!"

"I'm serious," Lewis insisted.

"Then I'm ready to take both chances. You may have suffered a loss of memory, and a loss of shape, but I think that if you had had a hostile intent, at least a trace of that attitude would have remained." He looked at his wrist. "It's midnight. My apartment's in this building. Unless you've got other commitments, how about staying with me while you're under treatment? It would make it easier to fit you in with my other patients."

"All right." Lewis looked at Fletcher quizzically. "You're going to a lot of trouble for me. I don't quite get it."

Fletcher laughed. "Scratch a psychiatrist and you'll find a repressed Sherlock Holmes. You chose the wrong man to get run down by."

Lewis smiled. "You know, I'm beginning to hope I chose the right one."

**B**Y noon the next day, Fletcher knew narco-analysis wasn't going to be the answer. To all questions relating to Lewis's existence before his discovery in the Oregon woods, his mind, freed from conscious control, made no answer at all. Even to suggestions of a crash, response was negative.

Fletcher was beginning to weigh

the possibilities of more drastic methods, like shock treatment, when a fresh idea hit him.

"Change into a St. Bernard dog," he said, feeling for a wild moment the ludicrousness of the command.

Lewis promptly changed into a St. Bernard.

"Now back again." Lewis's subconscious dutifully re-formed its owner.

"Mm-mm," Fletcher said to himself. A glimmer of light was dawning.

When Lewis came to, he told him what had happened.

"Your talent is a true reflex. It's automatic. It responds to suggestion when your conscious control is relaxed. If we could get your memory back, you'd naturally remember what your original shape was. But your memory is obviously not going to yield easily. So, say we reverse the process. Say we experiment on finding your shape. It might take a hell of a while, but if we hit on it, it should trigger the rest of your memory."

For the first time, something like elation came into Lewis's eyes. "Yes. I thought of that myself—that if I could only get back my original shape—but I gave up the thought as hopeless when I found I couldn't will it. But if you can do it—"

Fletcher cut across his excitement. "Don't be too optimistic. There's no guarantee we'll hit on

it, for one thing. Another is that amnesia may be proof against that, too. But if I do hit it, if I do give your subconscious the right command, it should create quite a stir in your psyche."

His smile was rather grim.

**D**URING the next two weeks, Fletcher did a drastic streamlining of his appointments book, putting off all but the most urgent and persistent cases.

It was the most fantastic fortnight he had ever spent. He kept his consulting room locked and shuttered whenever Lewis was in there. And he was there most of the time. He was tough, physically and mentally, and kept coming back for more, in between demanding to be told all the shapes that Fletcher successively dictated to his subconscious.

Fletcher set up every possible permutation and combination imaginable — but without a single response, except that Lewis's subconscious went through the motions as docilely as a trained seal. He did become a seal once — and every other creature in the world's catalogue, except for an occasional gap. The first time that happened, Fletcher thought he had hit on the right shape. Then he found, to his disgust, that it was due to the simple fact that Lewis just didn't have that particular creature in his stock of acquired knowledge.

So when that happened, Fletcher described the creature, and Lewis took it from there. The same routine was followed with all the fantastic imaginary shapes that Fletcher thought up. For, in the second week, the Earth was left behind. Local magazine stores did an unusual trade in science fiction magazines, and hundreds of illustrations took fleeting shape on Fletcher's couch.

Once, on Fletcher's instruction to assume some particularly fantastic shape, the willing subject gave a groan, and Fletcher tensed. That was the kind of reaction he'd been praying for. But his hopes immediately evaporated, for, with a contented sigh, Lewis made it. It had been only a temporary constructional difficulty.

At the end of the fortnight, Fletcher was ready to give in. He told Lewis so.

Lewis looked dismayed.

"Well, can you think of anything else?" Fletcher challenged him, for Lewis had taken over the task of indexing.

"No. Perhaps you can only get a response by an exact prompt—every detail, color and all."

"I know. That would put it on a par with the monkeys on the typewriters—a job for eternity. Before I tackle that, I think I'll take a look up in Oregon. I might get a clue there."

"I didn't."

"Maybe you were too close to it."

"But — you won't rouse any suspicion about me? I mean—"

"Yes?"

Lewis bit his lip. "I'm sorry."

"That's all right. I'll just say I'm a doctor handling your case. Strictly amnesia. I won't mention the rest."

Lewis beamed. "Right. And while you're away, I'll really analyze those shapes, just in case we overlooked or forgot one."

**FLETCHER** went by plane. A bus from the airport took him to the construction job. The township was nearly finished now, and most of the workers had been paid off. But he was lucky enough to contact the man who had found Lewis — a towering Irish foreman called Brannigan.

"He was stark naked and lost," Brannigan told him over a beer. "But he wasn't any trouble. Doc checked him and passed him as okay. Apart from his loss of memory or whatever it was. But he was a good worker, one of the best I ever had. Some of these good-for-nothing loafers, they—"

Fletcher waited patiently through a long complaint about the present-day worker — it was obvious that Brannigan had been reared in tougher days—then said: "Did you ever find anything round about?"

"Like what?"

"Well, did your workmen ever turn up anything like—well, documents, scraps of metal, anything? I'm trying to get a lead on Lewis's real identity."

Brannigan scratched his head. "I didn't hear of anything. We found a lot of Indian remains — pots, weapons, but nothing else. If anybody had, I'd have heard about it. And we cleared several miles around this project."

Fletcher sighed. "Okay, thanks."

On the plane back, he tried to add it up. But nothing plus nothing wasn't a very profitable sum. He might be a moderately successful psychiatrist — on ordinary cases, anyway—but as a Sherlock Holmes he was definitely deficient, he thought with disgust.

Then something clicked. Sherlock Holmes . . . the dog in the night . . . the dog that didn't bark. The spaceship that wasn't there. That didn't have to mean a thing, of course. If you could accept the fact of a man who could change shape and the conjecture of a spaceship, then you could accept a matter-transmitter, or whatever else writers employed to move their heroes between worlds.

But if there *had* been a spaceship, and there were no remains, that meant there hadn't been a crash. That, in turn, meant that—

By the time the plane touched down, Fletcher had explored a long avenue of conjecture. It had

kept branching off into realms of possibility that it would have been hopeless to follow. But, keeping to a path he *could* follow, he had tracked it out to the end, and at the end was one last possibility.

Lewis was waiting for him glumly in his office. "I've analyzed all the shapes."

"Well?"

Lewis shook his head sadly. "You covered the ground one hundred per cent."

"Only ninety-nine point nine nine nine," Fletcher told him. "Ready for one more try?"

Lewis nodded, a light of hope re-awakening in his eyes.

"Mind you, it's only a try," Fletcher warned. "One try — after the thousands we've made already. So don't expect too much."

Fletcher gave him a minimum dose, waited, then said the word.

It worked.

A CRY broke from the lips of the figure on the couch, accompanied by a great writhing of features and of form. Nothing like this had ever happened before. Then the figure sighed and changed. Eyes looked sightlessly up at Fletcher; strange words broke from a newly shaped mouth.

Fletcher waited tensely.

The drug was thrown off. The body straightened up. The eyes gained focus. They also changed color — to violet — and the rest of

the shape altered slightly as if changing from the general outline that had just been triggered to the particular, the original.

"How do you feel?" Fletcher asked.

"All right. It's all so confusing, having it come back to me. But how did you guess?" The voice had changed, which wasn't surprising, but still spoke English perfectly.

"I'll tell you. You just correct me if I'm wrong. All right? Oh . . . what do I call you now?"

"Ruvil."

"Is that first name or last?"

"Both."

"Right. Now — no trace of any spaceship was found near where you thought you had crashed. So I started figuring on what that meant. It could only mean that you were landed here by a ship that took off again. That, in turn, meant that you were already amnesiac. That could have meant that you were just dumped here because you were no longer any use as a member of the crew or whatever.

"But somehow I couldn't conceive of a race with a culture that could build spaceships abandoning one of its members as callously as that. But a race that could build spaceships could conceivably introduce an artificial amnesia into a subject. Artificial and permanent. Endangered by only one

thing — the talent that your species has for changing shape.

"Now I tried to place myself in the skin of a creature of another world that I didn't know a thing about. And I reasoned like this:

"First, for some reason, powers on your world wanted you out of the way. But they were too humane to kill you. Why didn't they just dump you on another world? Because you had some knowledge that they feared you could use. So — without at this stage going into what that knowledge might be — they gave you this artificial memory block before they dumped you.

"But there was always the danger that you might get into a spot that would cause you to change to your original shape — and trigger your memory. Now the really tough part came. Why did they choose this planet? Because they had never visited it before? But perhaps they had — incognito. Perhaps they're incognito on every world they visit, having the power they have. Obviously I couldn't get far on that tack.

"So then I pondered on just where on Earth they had dumped you. And then it clicked. They had left you with this artificial memory block — and probably in some neutral state, physically. You were just a blank, in mind and shape, when you saw a man approach, as they figured was bound

to happen before long.

"Your reflex acted. You became a man — the one shape you would never have reason to change from into your original. At least, not foreseeably. I wondered whether the difference was such as to matter. It obviously was."

**R**UVIL laughed now. "Believe me, it is. Didn't you know that?"

"On Earth, yes. Some men have said that your species is the most widely divergent from Man imaginable. But one or two things still have me puzzled. Just what did you know that was so dangerous to your own kind?"

Ruvil laughed again. "You know, that's one thing that hasn't come back yet. Anyway, I'm not worried. Oh, the intrigues back on Varn — that's the name of my world. They're extremely intelligent — and humane, as you correctly diagnosed — but also slightly cockeyed. It seems that the more developed a culture you get, the bigger the neuroses."

"But why have they never visited Earth? Openly, I mean."

"Because they never contact a world that's already well on the way to space travel itself. When a race is at that point, it's likely to go off the handle, before it gets its sights adjusted. There have been one or two unhappy incidents in the past. Yes, of course — that's

the knowledge they were frightened I'd use or pass on. Not the reason they banished me. That was some dreadful palace conspiracy. I am — was — a member of one of the dynastic families back on Varn."

"But why didn't they dump you on a more primitive world where your knowledge would be of no use to you?" asked Fletcher.

"Because — well, because Varn ships are in regular contact with them, I suppose. They had to choose a world like Earth — and any other developed culture is always humanoid. Yes, it was really clever of them to banish me here and to dump me in a practically all-man area. And —" Ruvil's violet eyes shone admiringly — "it was very clever of you to work it all out."

Fletcher coughed nervously and leaned back. "Yes, well . . . what

are your plans now? To show us how to build spaceships and lead a fleet back to Varn?"

Ruvil laughed tinklingly. "Of course not. They overestimated the attention I paid to my lessons at school. I wouldn't know how to start. Besides, what would I want with spaceships?"

Ruvil stretched luxuriously, and Fletcher had to admit that, in with such other obvious endowments, a knowledge of spaceship construction would have been rather redundant.

"No." Ruvil smoothed her long golden hair with delicate fingers. "There's lots of other Varnian lore that's much more worth knowing."

She got up from the couch in one lithe movement, far too quickly for Fletcher to have moved, even if he had wanted to. "For instance . . ."

—ARTHUR SELLINGS

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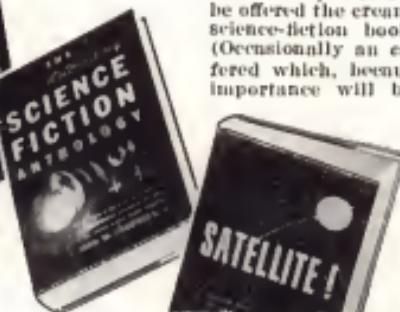
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